4128

82- SUBMISSIONS FACING SHEET

MICROFICHE CONTROL LABEL

REGISTRANT'S NAME **Vestas Wind Systems A/S**

***CURRENT ADDRESS** **Alsvej 21**
8900 Randers
Denmark

****FORMER NAME** _____

****NEW ADDRESS** _____

_____

_____

FILE NO. 82- 34884 **FISCAL YEAR** 12-31-04 **2004**

* Complete for initial submissions only ** Please note name and address changes

INDICATE FORM TYPE TO BE USED FOR WORKLOAD ENTRY:

12G3-2B	(INITIAL FILING)	☐	AR/S (ANNUAL REPORT)	☒
12G32BR	(REINSTATEMENT)	☐	SUPPL (OTHER)	☐
DEF 14A	(PROXY)	☐		

OICF / BY: Min

DATE:06/15/05

AR/S
12-31-04

Annual Report 2004

Vestas

Management report

Consolidated and annual accounts

Environmental statement

Board of Directors

Bent Erik Carlsen, Chairman
of the Board of Directors

Arne Pedersen

Kim Hvid Thomsen

Svend Åge D. Andersen

Jørgen Huno Rasmussen

Torsten Erik Rasmussen

Jørn Ankær Thomsen

Freddy Frandsen

Jesper Søndermark

Stagnating market in 2004 gives way to growth

In 2004, the global market for wind power remained more-or-less unchanged, with around 8,000 MW of newly installed capacity. The lack of growth was primarily attributable to a drop in deliveries to Germany and the United States, which were, however, offset by an increase in activities in the rest of the world.

On a stagnating global market, Vestas supplied 2,784 MW – an increase of around 4 per cent on 2003, when Vestas delivered 2,667 MW. Vestas thus obtained a global market share of approximately 35 per cent in 2004, an increase of approximately 2 percentage points on 2003.

As mentioned above, the German market fell in 2004. This was due in part to a change in the interpretation of legislation which resulted in a more complex approval process. This, in turn, caused a number of projects to be postponed. In the United States, the extension of the PTC scheme was delayed until October 2004, which resulted in the American market plummeting to just 389 MW – or only approximately 25 per cent of its level in 2003. At the same time, the fall in the value of the dollar increased competition on the market.

Vestas expects the stagnation of 2004 to be replaced by growth in 2005. This expectation is based on factors including the extension of the PTC scheme combined with positive development on a number of European and Asian markets. However, some uncertainty still surrounds several projects planned for implementation in markets related to the US dollar.

On the basis of expectations for the market in general, Vestas decided in 2004 to establish production facilities in China and North America. These plans are fully in line with Vestas' strategy of setting up local production of wind turbine components to the greatest possible extent so as to help reduce production and transport costs and thus improve the competitiveness of wind power.

In 2004, Vestas unfortunately experienced two tragic accidents that had fatal consequences. The two incidents have increased the focus even more clearly on employee safety.

The combination of NEG Micon and Vestas was a major event in 2004, and one that resulted in the creation of the leading manufacturer in the wind power industry – a manufacturer that has the technology, expertise and know-how in its organisation along with the financial strength to take on the increased competition that is sure to distinguish the future. We believe that the integration of the two organisations went well in 2004. Naturally, there are still a number of systems that need to be integrated in 2005 and 2006, but overall, the Vestas organisation is already in place and well underway developing and manufacturing competitive products, installing turbines all over the world and providing customers with the best possible advice and guidance.

Vestas is also of the opinion that the rapid launch of a shared, competitive and customer-friendly product range has generated good results. The new product range means that Vestas is even better equipped to provide customers with the optimal turbine models for sites with low, moderate or high winds – both onshore and offshore.

The product range is subject to continuous adaptation and development in relation to market demands and Vestas' own targets for improved competitiveness. In this context, the appreciable strengthening of the technology organisation has provided Vestas with an excellent base for ensuring the required drive and product development of the wind power systems of the future.

The Group's long-term goals remain:

- a global market share of at least 35 per cent, measured in MW of installed output,
- earnings before financial items and tax (EBIT margin) of at least 10 per cent,
- NetWorkingCapital at year end of a maximum of 25-30 per cent of turnover.

With a competitive product range and a highly skilled and motivated workforce, Vestas is well-placed to achieve its expected turnover of bnEUR 3.0-3.2 and an EBIT margin of approximately 4 per cent in 2005.

Bent Erik Carlsen
Chairman of the Board of Directors

Svend Sigaard
President and CEO

The "Willpower" sculpture reaches for the sky but remains firmly anchored to the ground – a symbol of Vestas' vision and values. The "Willpower" is created by the sculptor Jørgen Pedersen.

Wind power – an important source of global energy

Vision

"Vestas' vision is with quality and care to use the wind to generate competitive, clean and renewable energy. In future, wind energy will cover a substantial part of the global energy supply and contribute to sustainable development for the benefit of future generations. Vestas is to be the international market leader in the field of wind power systems – valued by customers, shareholders, employees and other stakeholders."

Vestas is convinced that the need for energy will increase considerably worldwide – in both the short and the long term. At the same time, Vestas expects that the consumption of electrical energy will extend to cover additional areas of use and will thus account for an increasingly larger portion of the total energy consumption.

As a result, the demand for competitive, clean and sustainable energy will grow in step with the increase of environmental awareness among the global population. In this context, wind power will play an important role, because it can already compete with coal, natural gas, oil and nuclear power when compared on equal terms. Including the costs of pollution and other external expenses in the comparison clearly shows wind power to be even more competitive.

However, Vestas is of the opinion that competitiveness will improve even further, as the price per kilowatt hour from a newly established wind power system is expected to fall by 3-5 per cent per year on average. This means that in the long term, the price of power from a newly established wind power system will be capable of competing with the variable costs that apply to conventional power plants. Similarly, Vestas believes that new technologies such as fuel cells will, in future, make it possible to store the electric energy generated by wind power plants. The power generated by wind turbines will thus no longer be exclusively reserved for supplying the national grid – it will be possible to convert it into environmentally friendly fuel as well.

Against this background, Vestas expects wind power to make an increasing contribution to global energy supply, and that the wind power industry will become one of the significant industries in the world.

Values

"Vestas' core values are trustworthiness, care, the power to act and development. These values are the foundations of Vestas' attitudes and corporate culture."

Trustworthiness and care are the very foundations of Vestas' growth.

Vestas must be a trustworthy partner in every respect. This means that customers, shareholders, employees and other stakeholders experience that Vestas keeps its promises.

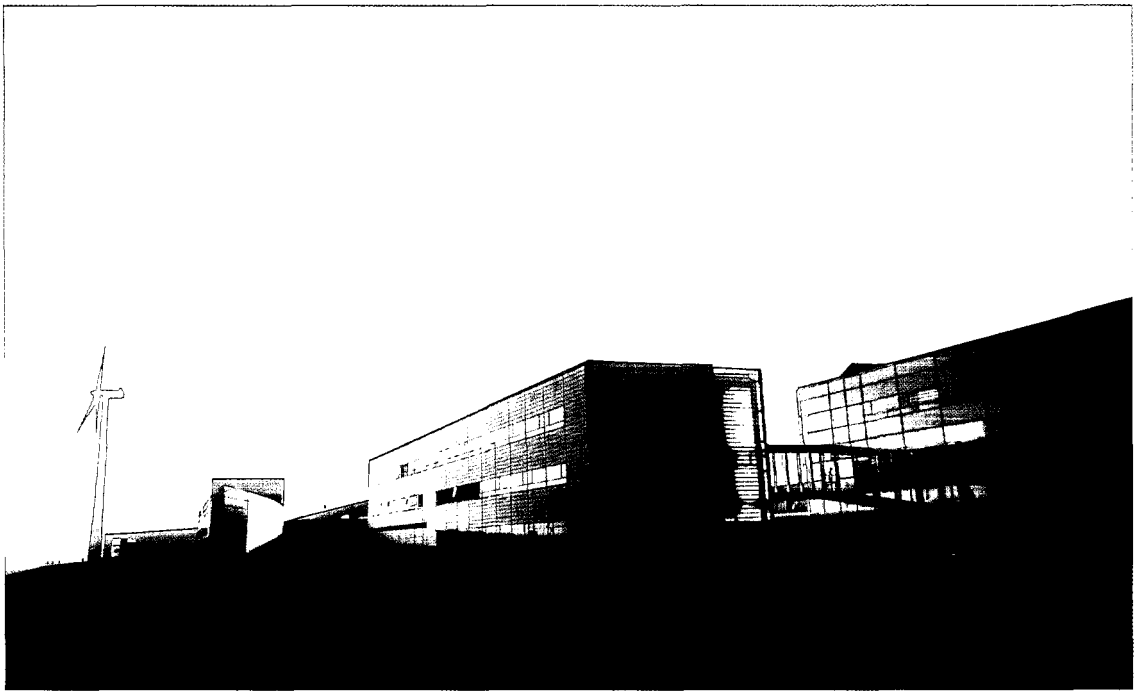
For Vestas care is a fundamental attitude. Safety, quality and efficiency are the key words in day-to-day activities. Safety is always to be given the highest priority, and all tasks must be completed properly, efficiently and with consideration for the environment.

Vestas must be known for its quality, efficiency and competitive products.

The power to act and development are the driving forces that are to ensure that Vestas reaches its stated goals.

Vestas wants employees for whom commitment and responsibility are important values, employees who have the will to growth and the courage to take on the challenges of doing one's best for the benefit of the customers and for Vestas.

Development is one of the most important value-creative activities. With more than 25 years of experience in the wind power industry, Vestas has built up the best pool of competencies in the industry. Constant striving for new and improved solutions for the benefit of customers is the very framework for Vestas' development and growth.



Vestas' head office in Randers, Denmark.

Knowledge and competencies must be developed through the continuous development of employees and via cross-organisational cooperation within an organisation that has the will to change.

Through visionary development work and innovation, Vestas is to continue to drive the development of wind power forward – both technologically and commercially.

Strategy

"Vestas' strategy is to supply customised wind power systems based on standard wind turbines and standardised options that can generate electricity of the optimal quality at the most competitive price."

Vestas' principal activities are the development, manufacture, sale and maintenance of systems that use wind energy to generate electricity. Vestas supplies a full range of products, from individual turbines to the delivery of turnkey wind power systems.

As a strong, independent partner, Vestas can supply guidance to customers in connection with the development, financing and ownership of wind turbine projects. However, Vestas never participates directly in these activities. On the contrary, Vestas is the independent system supplier.

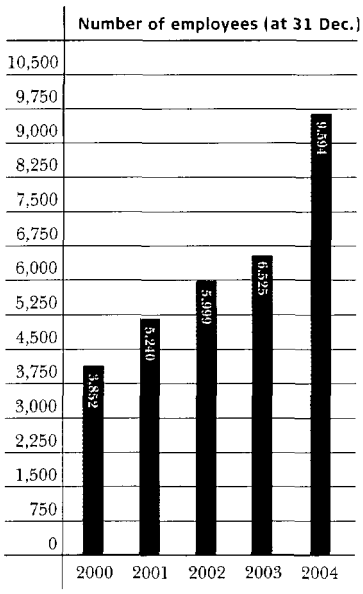
In a growing market, Vestas is distinguished by a high degree of vertical integration, manufacturing all components that cannot be purchased from external suppliers in standard or slightly modified forms. By manufacturing the principal parts of the turbine itself, Vestas increases the flexibility of its product development, reduces its dependence on suppliers, and maintains its high level of manufacturing know-how. At the same time, Vestas' strategy involves ensuring that production and sourcing are carried out as closely to the market as possible, which will similarly reduce dependency on different currencies.

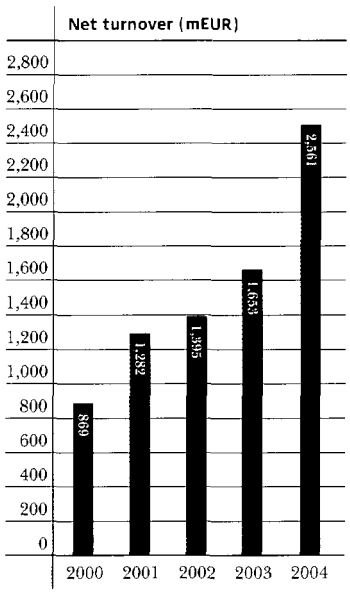
Goal

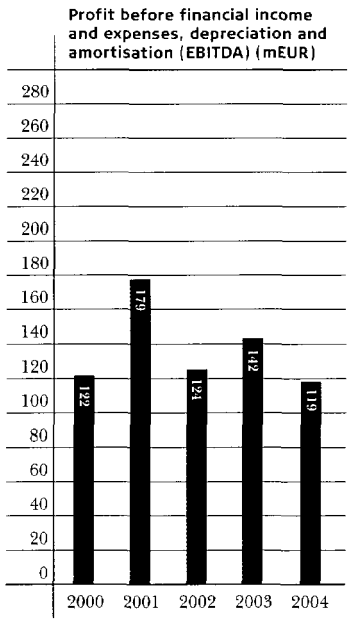
"Vestas' strategic goal is to be an international leader and to ensure sufficient financial strength to continue internationalisation."

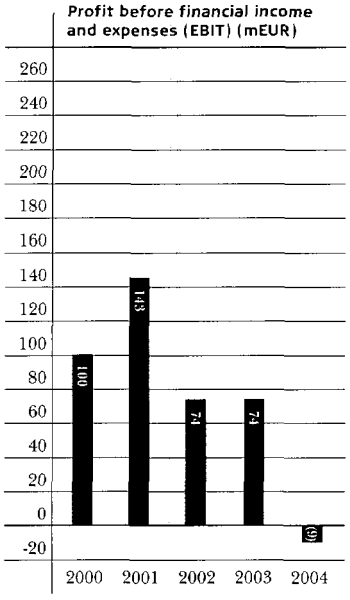
In order to achieve this strategic goal, the Group is to strive for:

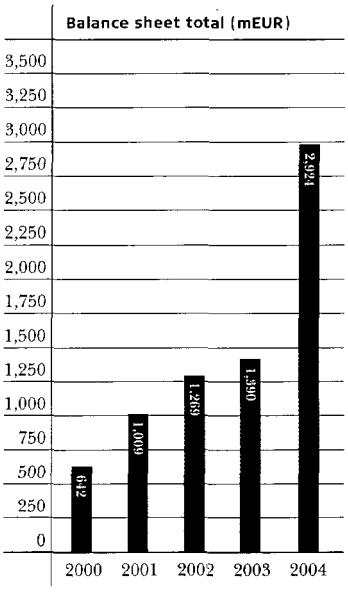
- a global market share of at least 35 per cent, measured in MW of installed capacity,
- earnings before financial items and tax (EBIT margin) of at least 10 per cent,
- NetWorkingCapital (NWC) at year end of a maximum of 25-30 per cent of turnover.

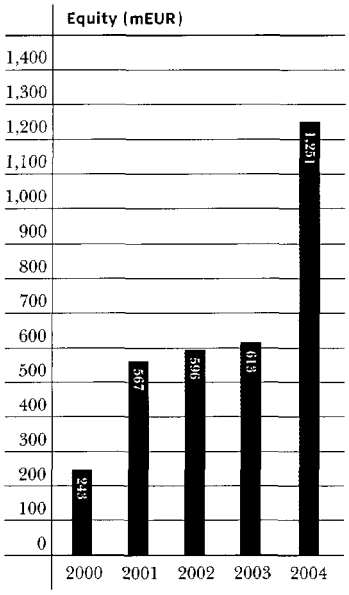

Number of employees (at 31 Dec.)
10,500
9,750
9,000
8,250
7,500
6,750
6,000
5,250
4,500
3,750
3,000
2,250
1,500
750
0
3,852
5,240
5,499
6,225
9,504
2000 2001 2002 2003 2004


Net turnover (mEUR)
2,800
2,600
2,400
2,200
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
869
1,282
1,395
1,633
2,561
2000 2001 2002 2003 2004


Profit before financial income and expenses, depreciation and amortisation (EBITDA) (mEUR)
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
122
179
124
142
119
2000 2001 2002 2003 2004


Profit before financial income and expenses (EBIT) (mEUR)
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-20
100
143
74
74
(9)
2000 2001 2002 2003 2004


Balance sheet total (mEUR)
3,500
3,250
3,000
2,750
2,500
2,250
2,000
1,750
1,500
1,250
1,000
750
500
250
0
612
1,009
1,269
1,390
2,924
2000 2001 2002 2003 2004


Equity (mEUR)
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0
243
567
596
613
1,251
2000 2001 2002 2003 2004

Over a five-year period the development of the Group can be described through the following financial highlights:

	2004	2003	2002	2001	2000
Key figures in mEUR					
Income statement:					
Net turnover	2,561	1,653	1,395	1,282	869
Gross profit	121	150	142	192	136
Result before financial income and expenses, depreciation and amortisation (EBITDA)	119	142	124	179	122
Result before financial income and expenses (EBIT)	(9)	74	74	143	100
Result after financial income and expenses	(50)	53	60	149	120
Result on ordinary activities before tax	(50)	54	60	392	123
Net result for the year	(39)	36	45	340	81
Balance sheet:					
Balance sheet total	2,924	1,390	1,269	1,009	642
Equity	1,251	613	596	567	243
Provisions	214	166	130	97	59
Interest-bearing liabilities	582	248	265	123	140
NetWorkingCapital	853	603	627	519	215
Cash flows:					
Cash flows from operating activities	(30)	153	(126)	(14)	14
Cash flows from investing activities	(529)	(119)	3	37	(92)
Change for the year in cash and cash equivalents and in short-term bank loans	287	15	(106)	20	(50)
Employees:					
Average number of employees	9,449	6,394	5,974	4,582	3,282
Hereof in Denmark	5,336	4,138	4,635	3,812	2,772
Financial ratios:					
Gross margin (%)	4.7	9.1	10.2	15.0	15.7
EBITDA (%)	4.6	8.6	8.9	13.9	14.0
Net profit ratio (EBIT) (%)	(0.4)	4.5	5.3	11.1	11.5
Return on investment 1 (%)	(0.4)	5.8	7.3	20.3	21.5
Return on investment 2 (ROCE) (%)	0.1	8.9	9.8	31.0	43.4
Solvency ratio (%)	42.8	44.1	47.0	56.1	37.8
Return on equity (%)	(4.2)	5.9	7.8	84.1	39.8
Gearing (%)	46.6	40.4	44.5	21.6	57.5
Share ratios:					
Profit per share	(0.3)	0.3	0.4	3.2	0.8
Growth in profit per share (%)	-	(21.3)	(86.7)	319.3	31.9
Net asset value per share	7.2	5.8	5.7	5.4	2.3
Price/net asset value	1.2	2.2	1.7	5.7	25.5
P/E - value	-	38.6	21.9	9.5	76.4
Cash flows from operations per share	(0.2)	1.5	(1.2)	(0.1)	0.1
Dividend per share	0	0	0.1	0.2	0.1
Payout ratio (%)	0	0	23.5	6.2	17.4
Market price at 31 December	8.8	13.1	9.4	30.9	59.2

The financial ratios have been calculated in accordance with the guidelines laid down by "Den Danske Finansanalytikerforening" (the Danish Society of Financial Analysts) (the guidelines from 1997). Please refer to the section entitled "Explanation of Ratios". No restatement has been made of the comparative figures for 2000-2003 in connection with the combination with NEG Micon A/S.

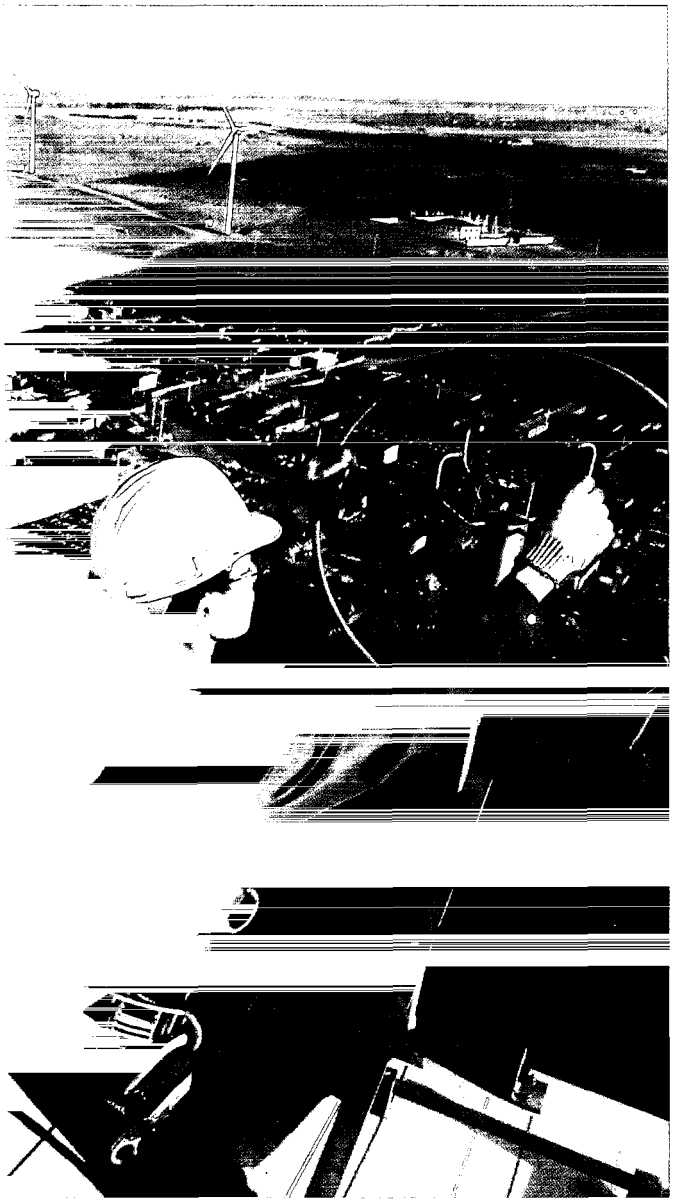
China – a market with great potential

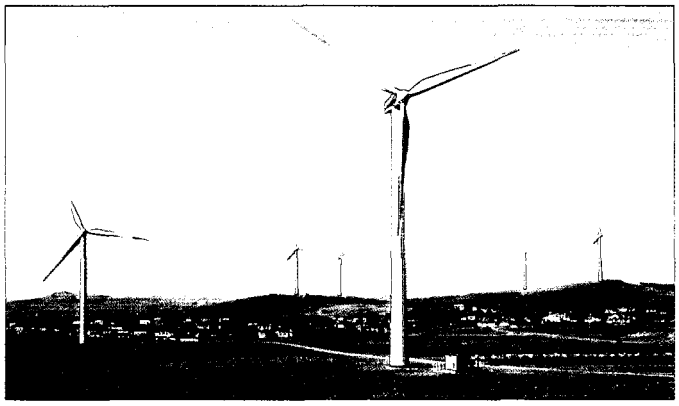
According to the International Energy Agency (IEA), China is currently the second-largest economy in the world, and it is expected to take the first place in 2030. With annual growth rates of around 8-10 per cent, it is expected that China's share of total global energy consumption will rise to 16 per cent in 2030. This rapid economic growth has already resulted in electricity shortages, which could easily become an obstacle to continued economic growth in this country.

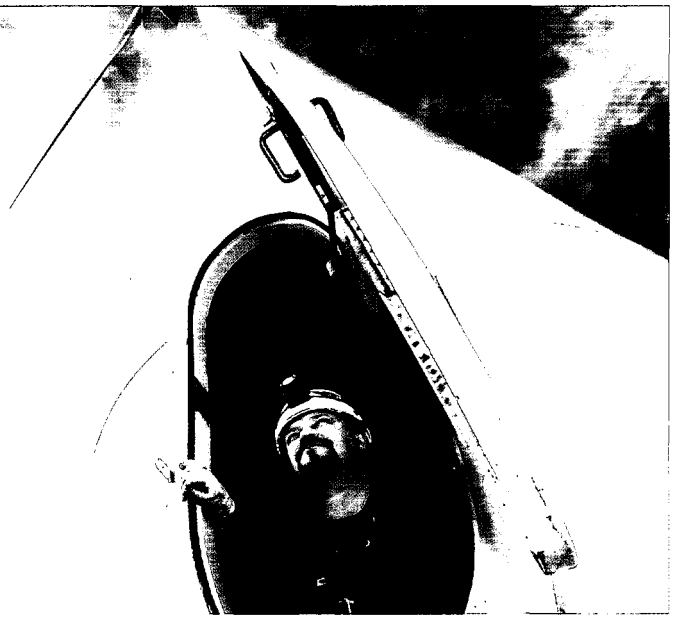
In February 2005 the Chinese government passed a new law aimed at promoting the use of sustainable energy. The aim is to create a legal framework to utilize the country's sustainable energy capacity. The law states that consumers are to cover

part of the costs for the use of sustainable energy, while electricity utilities are obliged to purchase supplies from sustainable sources of energy. The announced target of 120,000 MW in 2020 corresponds to 12 per cent of energy supplies in 2020 stemming from sustainable sources of energy. Vestas predicts that wind power will account for a significant portion of this growth.

The pictures below are from Kang Ping, Liaoning, where Vestas installed 12 V52-850 kW turbines in 2003.







Employees are an important asset for Vestas, so safety has always top priority for all employees in all work situations.

2004 – a year of great changes and exciting challenges

Compared to 2003, the Group's income statement for 2004 and balance sheet at 31 December 2004 are significantly affected by the combination of Vestas and NEG Micon. As described below, the combination has created a stronger company well positioned, however, it has also resulted in one-off costs and general disturbances to the operations, which is a natural effect of a combination of two global groups.

At the beginning of the year and at the time of the approaching combination, a lot of external sources were questioning whether the combined company would be able to keep focus on the order intake and consequently the turnover, which seen in relation to a stagnating world market already was considered ambitious.

It is therefore very satisfactory that the Group in the year of the combination has succeeded in achieving the expected turnover and even increasing the market share by two percentage points. The Group's turnover in 2004 was mEUR 2,561, of which approximately 66 per cent, equivalent to mEUR 1,687 was realised during the second half of 2004. 34 per cent of the Group's turnover was generated outside Europe. The net result for the year is mEUR -39 and is affected by one-off costs amounting to mEUR 153. The result for the year is not satisfactory.

The Group accounts for 2004 include NEG Micon A/S for 10 months as the combination came into effect as from 1 March 2004. The realised full-year turnover is mEUR 2,633.

With a view to making possible a comparison with the Group's expectations, which have been expressed on the basis of full-year operation of the combined group, the table below presents an unaudited pro forma summary of the income statement and ratios for the combined group for full-year 2004. The stated balance sheet figures are from the Group's balance sheet at 31 December 2004.

(mEUR)	2004 (unaudited)	2003 (unaudited)
Pro forma income statement:		
Net turnover	2,633	2,361
Gross profit	270	163
EBITA before one-off costs	146	28
One-off costs	153	0
Result before financial items (EBIT)	-25	28
Balance sheet at 31 December:		
Balance sheet total	2,924	2,216
Equity	1,251	828
Provisions	214	228
Pro forma ratios:		
Net profit ratio (EBITA) (%)[1]	5.6	1.2
Net profit ratio (EBIT) (%)[2]	(0.3)	1.2

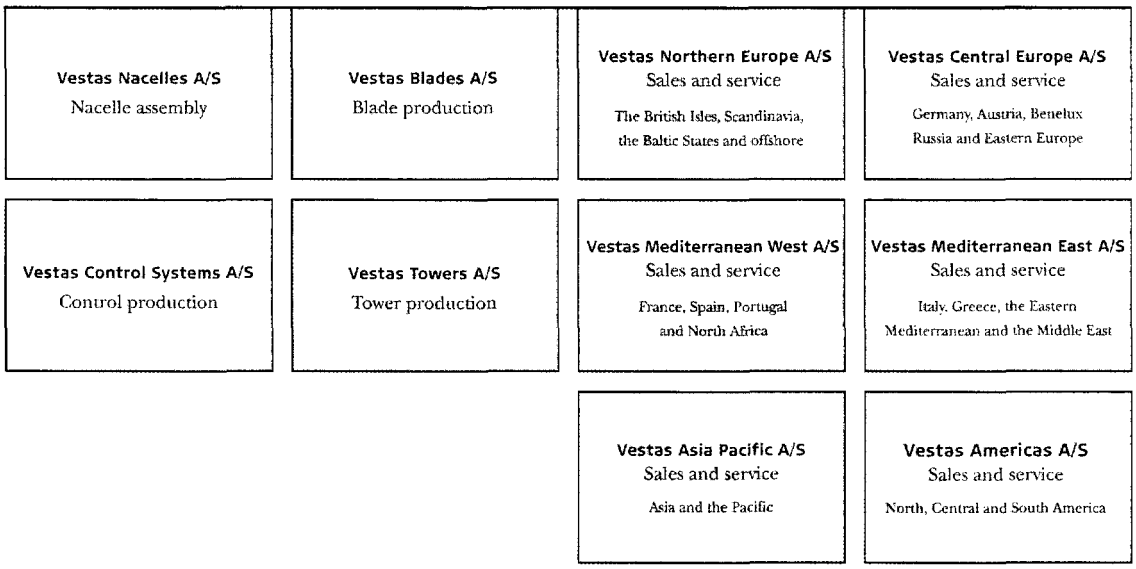
Due to the combination and the costs in connection with this, the Group decided already at the time of the financial reporting for 2003 to measure the expectations for 2004 not only on EBIT but also on EBITA before one-off costs.

At the beginning of the year, Vestas' financial forecasts for 2004 pointed to a turnover for the year of approximately bnEUR 2.7-2.8 with an EBITA margin[1] of approximately 7 per cent. Net working capital was expected to amount to around 30-35 per cent of the net turnover for the year. As stated in Vestas' Offering Circular of 12 May 2004, it was expected that the American Production Tax Credit (PTC) would be extended in the summer of 2004, and the Group's expectations for 2004 included deliveries of around 150 MW, which were termed "PTC-dependent". However, the expected extension of the PTC scheme in summer 2004 failed to materialise. As a result, in August 2004 Vestas reduced its turnover forecast to around

[1] *EBITA margin including expense synergies, but before one-off, integration and restructuring expenses as well as amortisation of goodwill in connection with the combination with NEG Micon.*

[2] *EBIT margin before amortisation of goodwill in connection with the combination with NEG Micon.*

Figure 1:



Vestas' organisation is divided into four global production units and six regional sales and service units.

bnEUR 2.6 and its EBITA[1] expectations to 6 per cent, cf. Stock exchange announcement No. 32/2004 of 9 August 2004.

The Group realised the targeted EBITA margin[1] in spite of the challenges from the combination and the consequent disturbances to the operation, as well as the seasonal distribution of turnover and the consequent demand to planning.

One-off costs amount to approximately mEUR 153, of which mEUR 38 are related to the Horns Reef project and mEUR 115 are related to integration and restructuring costs in relation to the combination.

The Horns Reef project has now been completed, however, negotiations between the parties of the project are still pending.

Integration and restructuring costs comprise as follows:

- Costs in connection with resignation of staff, closing of offices and termination of agency agreements etc. at a total amount of mEUR 31.
- Costs in relation to restructuring of the legal company structure and adaptation of internal working procedures and systems at a total amount of mEUR 60.
- Re-classification of lower margins than expected on sales contracts made in NEG Micon before the combination. This loss amounts to mEUR 24.

The statement of integration and restructuring costs is a total of directly registered costs and an assessment of defrayed internal costs.

Goodwill at the time of the combination with NEG Micon A/S is at 31 December 2004 assessed to mEUR 286 compared to previously expected and announced in the order of mEUR 200-230. The increased goodwill comprises a re-evaluation of assets and commitments at the time of the combination among others based on the changed market strategies, the product programme etc.

Net Capital expenditure in 2004 in tangible fixed assets amounted to mEUR 80, which is below the expected level. This is largely due to postponements until 2005.

In March 2004, the combination of Vestas and NEG Micon became a reality. The move created the undisputed world-leader within the wind power industry, with a market share of approximately 35 per cent. The basis for the combination was a desire to create a group of a size that would make it possible to exploit growth opportunities on the market for wind power, particularly as regards offshore projects and largescale onshore projects. In addition, utilisation of best practice in the fields of technology, design and production technology from the two companies would contribute to improving the competitiveness of wind power plants, thus helping Vestas to reach its strategic goals.

In May/June 2004, Vestas completed a capital increase that generated net proceeds of mEUR 283. The increase was carried out as a preemption issue for existing shareholders, and on 11 June 2004, Vestas was able to announce that the issue had been fully subscribed, cf. announcement No. 25/2004 to the Copenhagen Stock Exchange. This meant that the goal of strengthening the Group's capital base had been achieved.

One of the tasks that attracted appreciable focus in 2004 was the work to improve operation of the Horns Reef offshore wind farm. Investigations revealed that a range of components were not living up to expectations. As a result, Vestas – in consultation with Elsam A/S, the owner of the wind power plant – decided to bring all 80 nacelles and 240 blades ashore. A range of improvements were implemented and by the end of November 2004, all 80 V80-2.0 MW offshore turbines had been recommissioned. Experience from this work was gained at great expense, but still proved very valuable for Vestas, which

V82-1.5 MW turbine installed in Pollenfeld, Germany.

will be able to use it in the implementation of new off-shore projects, in the design and manufacture of new products, and in installation and service procedures.

Despite the high level of pressure and the tight deadlines at Horns Reef, focus remained firmly on the requirement to prioritise safety throughout the process, and it is very satisfactory to note that the project was completed without any serious industrial injuries. Unfortunately, 2004 was also a year marked by two tragic accidents in which two employees lost their lives in connection with the performance of their jobs. Against the background of these incidents, the management of the Vestas Group has emphasized that safety must always have the highest priority for all employees in all work situations.

In connection with the approval of Vestas' Annual Report 2003, two new members of the Board of Management of Vestas were appointed. Torben Bjerre-Madsen (the former CEO of NEG Micon) was appointed Executive Vice President and Deputy CEO and Knud Andersen (the former CPO of NEG Micon) was appointed Executive Vice President and CPO of the combined group, cf. Stock exchange announcement No. 09/2004 of 17 March 2004.

In the autumn, two changes to Vestas' Board of Management were made public. At the end of September 2004, Torben Bjerre-Madsen stepped down from his position of Executive Vice President and CEO. In October 2004, Svend Sigaard, President and CEO, announced that after 18 years with Vestas, he had decided that it was time to step aside to make room for his successor. Svend Sigaard will be leaving the company on 1 May 2005 and will be replaced by Ditlev Engel, who joins Vestas from Hempel A/S – for additional details please refer to the section entitled "Events after the end of the financial year" on page 38.

The Vestas organisation is divided into global production units and regional sales and service units. Following the combination of Vestas and NEG Micon, there are now four production units and six sales and service units, cf. figure 1 on page 13. This structure ensures clear lines of communication and responsibility.

Integration progressing according to plan

The combination of Vestas and NEG Micon was initiated in March 2004. The stated goals and plans have generally been achieved over the course of 2004 and a great many integration activities were completed during the year.

Immediately after the combination of the two companies, the organisational and legal corporate structure was laid down. Distinguishing features of the new structures included the decision to divide the organisation into four global production units and six regional sales and service units. In addition, the organisation of the central technology, finance and staff functions was firmly established. The implementation of the organisational and corporate structure has largely been completed.

Integration to continue in 2005

During the second quarter of 2004, Vestas' product range was defined, as regards products currently on the market and those under development. The current and future products are built on the shared strengths of NEG Micon and Vestas, which is expected to reinforce the position of the company on the market.

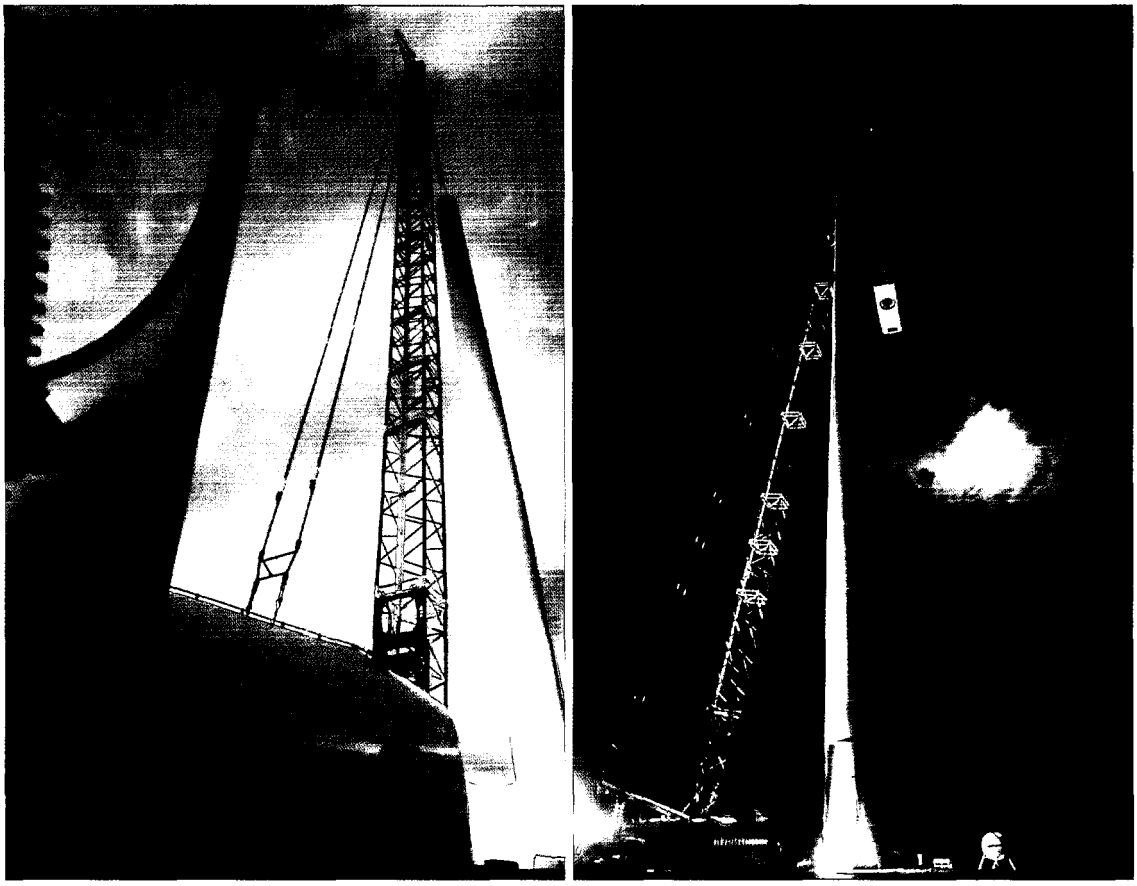
In 2004, the integration process was implemented with the assistance of a range of employee groups set up across the boundaries of the individual units and functions. The separate groups have worked on specific integration tasks such as corporate structure, reporting systems, corporate identity and the achievement of synergies within specific areas.

Integration of the administrative systems will continue in 2005. For example, the shared IT system is to be implemented worldwide. The process is ongoing and is scheduled for completion in 2006.

Synergies stemming from the combination

One of the significant grounds for the combination of NEG Micon and Vestas was the goal of achieving appreciable cost synergies.

A large proportion of the planned synergies is expected to stem from the area of purchase and production including improved purchasing agreements resulting from the increased volume. In this regard, Vestas has been in dialogue with all the



One of the major projects in Germany in 2004 involved installation of the 31 V90-2.0 MW wind turbines that make up the Porep project in Brandenburg.

major suppliers and has drawn up new collaboration agreements that match Vestas' expectations for savings.

Other planned synergies have likewise been realised so that the combined synergies generated the expected mEUR 14 in 2004. In 2005, Vestas continuously expects to achieve cost synergies worth mEUR 47. It is expected that these synergies will primarily be achieved in the fields of purchasing and production. In 2006, the full synergy effect of the combination is expected to total mEUR 67.

Global focus on customers

Utilities and energy companies constitute an increasingly larger part of the Vestas customer portfolio. At the same time, wind power projects are becoming much larger and often form actual power plants as regards both production capacity and control options.

This development is one of those that led Vestas and NEG Micon to join forces in March 2004 so as to be optimally placed to live up to the modified needs and requirements that apply to the industry's leading supplier of wind power systems.

Positive reception

Immediately after the final approval of the combination in March 2004, the Global Windpower trade fair and conference was held, an event organised by the American Wind Energy Association (AWEA) in Chicago, USA. Here, Vestas noted that customers and other stakeholders in the wind power industry were positively disposed towards the combined Group.

Vestas is also of the impression that the rapid launch of a combined, competitive and customer optimised product range has generated good results. The new product range means that Vestas is even better equipped to provide customers with the optimal turbine models for sites with low, moderate and high winds – both onshore and offshore.

The product range is subject to continuous adaptation and development in relation to market demands and Vestas' own targets for improved competitiveness. In this area, the Group – with the significant reinforcement of its technology organisation and strong capital base – has the opportunity and the capacity to ensure progress and product development that create value for customers.

Local presence

Vestas considers close contact with customers to be an important parameter. As such, it is important that the full weight of Vestas' know-how is available at the right time and in the right place, irrespective of whether it be required in connection with consultancy concerning the purchase of new wind power systems, handling problems with the completion of projects, or ongoing service and maintenance during the lifetime of a turbine. This contact is maintained at global level through local presence.

NM48–750 kW wind turbines installed in Funen, Denmark.

This presence is illustrated, for example, by Vestas' sales and service organisation, which consists of six regionally distributed units that have responsibility and competence in relation to sales, project implementation and service within their respective geographical areas. Under the regional sales and service units are the local units that act as service centres with responsibility for everyday contact with the customer. This structure ensures clear, unambiguous lines of communication and responsibility and guarantees local presence.

Focus on service

As the world's leading manufacturer of wind power systems, Vestas' aim is to provide the best global service in the industry with the strongest local presence so as to achieve the highest level of customer satisfaction.

Vestas therefore works constantly on the development of new service concepts that can improve the operation of Vestas turbines and thus generate the greatest possible value for the customer and for Vestas.

An important tool in this work is the surveillance centre, which online monitors the turbines' operation 24 hours a day. As such, the surveillance centre contributes to Vestas' ability to react quickly and appropriately and ensures that the turbines maintain the highest possible availability.

Another focus area is the development of a new global service concept in which customers are given a guarantee of the availability of the turbine for a number of years in excess of the normal warranty period. This will allow customers to be more certain that the planned earnings will in fact be generated, and will therefore also contribute to a higher level of certainty in connection with project financing. It is expected that this concept will be introduced in 2005.

Customer satisfaction

A high level of customer satisfaction is important to Vestas. Therefore, Vestas systematically carries out customer satisfaction analyses that constitute an important tool in the ongoing work with quality improvements throughout the Group. In 2004, a customer satisfaction survey was carried out among customers who purchased wind turbines from Vestas and/or NEG Micon in 2003.

The survey shows that customers are generally less satisfied than in the previous year. In the most recent survey, 61 per cent of the customers asked said that they were either very satisfied or

Deliveries to Spain in 2004 included 10 NM82-1.5 MW wind turbines for the Las Lomas project in the Granada region.

satisfied. The corresponding figure from the previous survey was 71 per cent.[3] Despite the criticism, Vestas is still considered a stable company – in the long term, too. Vestas' technological concept is rated very highly, and there is general satisfaction with the employees' knowledge about the products.

Vestas considers the results of this survey to be unsatisfactory. Change is required in relation to Vestas' focus on customers and on everyday follow-up to ensure that agreements made are completed on time and live up to customer expectations.

In addition, improvements must be made as regards the availability of the turbines – an area on which Vestas places great emphasis. As a natural part of the work to improve the operation and availability of the turbines, Vestas monitors the operation of more than 5,000 new turbines in and above the 660 kW class. In 2004, a range of initiatives were implemented to improve turbine availability and a positive effect has already been measured. It is expected that this positive effect will be reflected in future customer satisfaction surveys.

A number of different activities have also been initiated in areas in which customers have indicated that improvements are needed, and Vestas expects to see the results of these initiatives in 2005.

[3] *The previous customer satisfaction analysis only included customers, who had bought Vestas wind turbines.*

Through the combination of Vestas and NEG Micon, Vestas has ensured appreciable growth in the company's total pool of knowledge, including know-how about technology, production, markets and service.

The Vestas organisation is tailored for the challenges of the future

Since the combination of Vestas and NEG Micon, the organisation has been adjusted to ensure that it is well placed to meet and deal with the challenges Vestas is facing.

In connection with this adjustment, Vestas was obliged to let around 475 employees go in spring 2004. This should be seen as an expression of the streamlining of a range of doubled functions.

At the end of 2004, the Vestas Group numbered 9,594 employees, an increase of 302 in relation to the end of 2003. The increase in the number of employees reflects the increase in activities of the Group in 2004, in particular within sales and service.

Decentralised training is a financial gain

One of the initiatives in the area of personnel in 2004 was the establishment of a mobile education and training centre for the employees of the blade factories. The centre, which consists of four mobile office units containing teaching rooms and equipment, has been set up at the blade factories in Lauchhammer, Germany, and Nakskov, Denmark.

The training centre helps to make sure that the employees receive the correct training in manufacturing blades of the appropriate quality. At the same time, the decentralisation means that employees can receive their training locally and therefore do not have to spend weeks or months away on courses.

Growth in knowledge

Knowledge is a precondition for Vestas' ability to maintain and develop its leading position on the market for wind power, a position distinguished by high growth rates and expansive technological development as regards both capacity and efficiency.

Through the combination of Vestas and NEG Micon, Vestas has ensured appreciable growth in the company's total pool of knowledge, including know-how about technology,

production, markets and service. These are four of the most important areas – areas in which knowledge and development are quite simply crucial.

The development of competitive products is of great importance to Vestas' competitiveness and to the dissemination of wind power in general. Vestas is well equipped for this task and has the greatest resources in the wind power industry in the form of highly skilled employees in the technology function.

Extensive knowledge, familiarity with the markets and the ability to profile the company and its products are all important concepts that contribute to improving Vestas' large share of the wind power market. Through local presence at global level, Vestas has a firm base from which to follow the development of the various markets and, against this background, to place the best possible expertise at the disposal of its customers. Local presence is similarly important in the field of service. By maintaining a local presence, Vestas ensures that customers receive the fastest and most highly qualified service and maintenance of their wind power systems.

Constant improvements of production processes and work methods help to improve efficiency and quality. In 2004, Vestas has been working to introduce new work methods. For example, a large number of the employees at Vestas' blade factories are now organised in teams. The areas where this method of working has been introduced have seen improvements in quality and efficiency as well as an increase in well-being among the employees.

Increased focus on quality

In 2004, the keyword for employees was integration. In all areas of the organisation, a great deal of work has been carried out on integrating employees from the two organisations. The work has already begun to pay off, but it must be continued in 2005 to achieve even greater improvements.

In parallel with the integration projects, 2005 will see increased focus on ensuring that the quality assurance and quality control systems are fully implemented in all parts of the Vestas Group. Once a single, shared set of systems has been implemented, it is expected that the Group will be able to achieve a more uniform product quality in all areas. The increased focus on quality throughout the organisation and in all business procedures will help to make sure that Vestas' customers always receive products of uniform and high quality.

Sustainable development

Social responsibility is a natural part of Vestas' management philosophy and value set, and Vestas exercises its social responsibility both internally within the Group and externally with reference to the surrounding community. Vestas' desire for sustainable development for the company encompasses social responsibility, environmental responsibility and financial profitability.

Vestas employs and promotes people on the basis of skills and qualifications, irrespective of nationality, race, gender or creed. Moreover, work is done continuously to create a good framework for the employees.

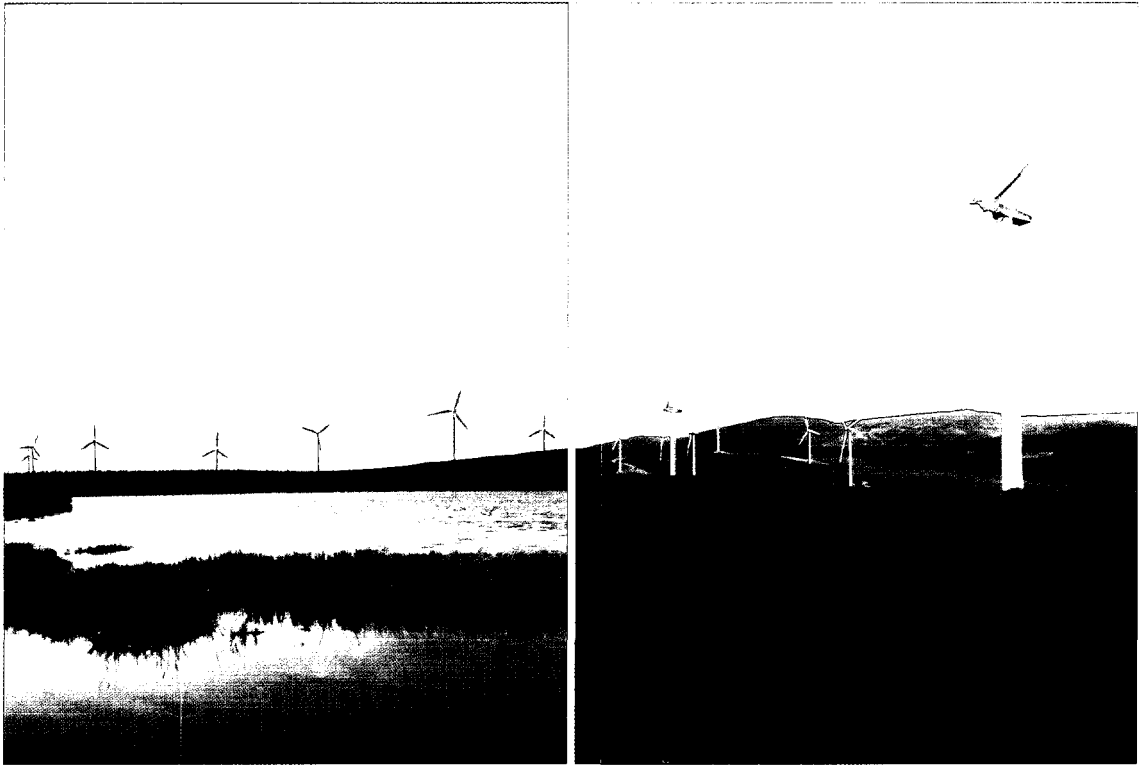
One result of the combination of Vestas and NEG Micon was that in spring 2004, the staff was reduced by approximately 475 people – around 325 white-collar workers and up to 150 blue-collar workers. The cuts were primarily made in Denmark and Germany and affected all areas in the fields of product development, sales, production and administrative functions.

In connection with the downsizing, Vestas made sure that all the employees affected received the necessary support so that the process could be carried out as smoothly as possible given the circumstances. Managers faced with laying off staff were offered a course in how to handle the situation. Employees who were to be made redundant were offered a 2-day training course in general job seeking. This was subsequently backed by individual job seeking counselling for each employee affected.

Through relevant dialogue and active collaboration with business partners, Vestas will constantly strive to improve understanding for reinforcing norms and work for continuous improvement in all areas related to safety, social responsibility, human rights, health and safety on the labour market, business ethics and the external environment.

As the basis for its standards and objectives, the Group uses framework agreements set up by international organisations – as the UN, ILO and OECD – as regards ensuring ethical responsibility and credible behaviour. Through work in collaboration and safety committees, and in their everyday work, employees of the Vestas Group will strive to promote the principles, guidelines and procedures laid down in these framework agreements. Additional information about these agreements is available online at www.vestas.com under "Profile".

So far, Vestas has not given any significant financial support or made significant contributions to social programmes outside the Group. As from 2005, Vestas will make an annual donation to The Red Cross.



In Raheen Barr, Ireland, Vestas has installed 22 V52-850 kW turbines.

Safety at work has top priority

Vestas' activities and products affect the external environment and occupational health and safety. In addition, environmental and occupational health and safety aspects have an influence on Vestas' business development and operations. Consideration for the environment and occupational health and safety is deeply rooted in the Vestas organisation. In addition to supplying wind power systems for the generation of sustainable energy, Vestas considers it natural to include consideration for the environment and occupational health and safety in all its operations and development activities.

Vestas has highlighted waste, energy, absence due to illness and industrial injuries as significant environmental and occupational health and safety aspects from an operational perspective. As regards operating activities, Vestas is working to deploy the environmental management and occupational health and safety systems firmly in all Group companies. Vestas' environmental management and occupational health and safety systems cover the development, production, installation and servicing of wind power systems according to the ISO 14001 and OHSAS 18001 standards.

In 2004 Vestas has mapped environmental and occupational health and safety aspects for the Group's casting facilities. The result of the mapping will be included in Vestas' continuous efforts to improve the Group's environmental and occupational health and safety aspects.

Vestas has always given high priority to safety at work, and has over the years made a concerted effort to improve safety in all aspects of its employees' everyday work situations.

Safety first

In 2004, Vestas experienced two tragic accidents that had fatal consequences. Vestas' management neither can nor will accept risks to the safety of its employees and the two accidents have increased the focus even more clearly on employee safety. The causes of the two incidents have been investigated, and it was established that the product and the documentation material pertaining to the performance of the work did live up to the applicable requirements. Both accidents occurred because safety regulations were ignored, and the management has therefore stressed to employees that all safety regulations must be followed at all times.

At Vestas, safety comes first, as is clearly reflected in Vestas' environmental and occupational health and safety policy. The incidents naturally affected all areas of the Vestas organisation, and a number of initiatives have been implemented to ensure that accidents of this kind do not happen again. For example, a new training programme for safety procedures has been set up and will be held for all employees who work in and around installed turbines.

"The Vestas Ranger" a widely used tool

Vestas registers both near misses and industrial injuries, and management and employees work together to prepare corrective actions for all reported incidents so as to prevent industrial injuries.

"The Vestas Ranger" is a widely used tool at sites all over the world. "The Vestas Ranger" presents information about the most recent industrial injury in both text and pictures and states how long it has been since the incident occurred. This makes sure that everyone at the site is informed of the most recent incident and increases awareness of the risks linked to the work. In this regard, it should be noted that at the end of 2004, the mould construction department in Videbæk, Denmark, could celebrate 793 days without an industrial injury.

Another initiative aimed at improving safety is the project entitled "Zero injuries, zero errors, zero waste", which was implemented at the blade factories in Denmark in 2003. For additional details, see the "Environmental Statement" on page 92.

Wind turbines generate positive impact

Significant forms of impact on the external environment stemming from Vestas' products include the visual impact of the turbines on their surroundings, emissions of noise from turbines in operation, and nonrecyclable waste from decommissioned turbines. However, it should be stressed that the most significant impact on the external environment stems from the volume of sustainable energy generated by wind turbines.

For example, during its 20-year design lifetime, a V90-3.0 MW offshore wind turbine will generate 35 times as much energy as it consumes in its entire life cycle. Vestas delivered 2,784 MW in 2004. The power generated annually by these turbines corresponds to the annual electricity consumption of approximately 2.1 million Danish households.[4] The power generated annually by the turbines delivered means savings of approximately 4,009,000 tons of CO_2 in relation to the electricity generated in Europe, as on average the generation of European electricity results in emissions of 548 grams of CO_2 per kWh.[5]

As a part of the Kyoto Protocol, the EU has passed a directive that requires the individual member states to make gradual reductions in their emissions of CO_2. Selected companies in the member states are allocated CO_2 quotas for their maximum emissions. If these companies wish to emit more or less CO_2 than their quotas allow, then these can be traded via the Emissions Trading Registry. From the perspective of their 20-year design lifetimes, the electricity generated by the wind turbines will be equivalent to a saving of approximately 80,187,000 tons of CO_2.

In 2004, the Danish government completed negotiations for CO_2 credits in which 1 ton of CO_2 is traded for between EUR 4.7 and EUR 6.6.[6] 80,187,000 ton CO_2 will thus generate between mEUR 377 and mEUR 529 for Vestas customers purely in trade with CO_2 credits.

"The Vestas Ranger" presents information about the most recent industrial injury in both text and pictures and states how long it has been since the incident occurred. The "Vestas Ranger" is thus a tool that is widely used to increase awareness of the risks associated with the work.

If any of the companies selected by the EU should exceed their quotas, they will, in the period 2005-2007, be fined EUR 40 per ton of CO_2. As from 1 January 2008, the fine will increase to EUR 100 per ton of CO_2 emitted in excess of the quota allocated. This is equivalent to approximately bnEUR 3.2 for fines of EUR 40 and around bnEUR 8.0 for fines of EUR 100 seen in relation to the CO_2 saved from the turbines delivered by Vestas in 2004 over their design lifetime.[7]

The Environmental Statement on pages 92-107 explains Vestas' work with environmental and occupational health and safety issues in more detail. Additional information is available online at www.vestas.com under "Environment".

[4] *"Energy Statistics 2003", which is published by the Danish Energy Agency, states the electricity consumption for 2003 for an average Danish household exclusive electricity for heating to 3,430 kWh per year.*

[5] *Calculation based on "Opdatering af UMIP-databasen" (Updating the UMIP database), work report from the Danish Environmental Protection Agency, No. 27, 2002.*

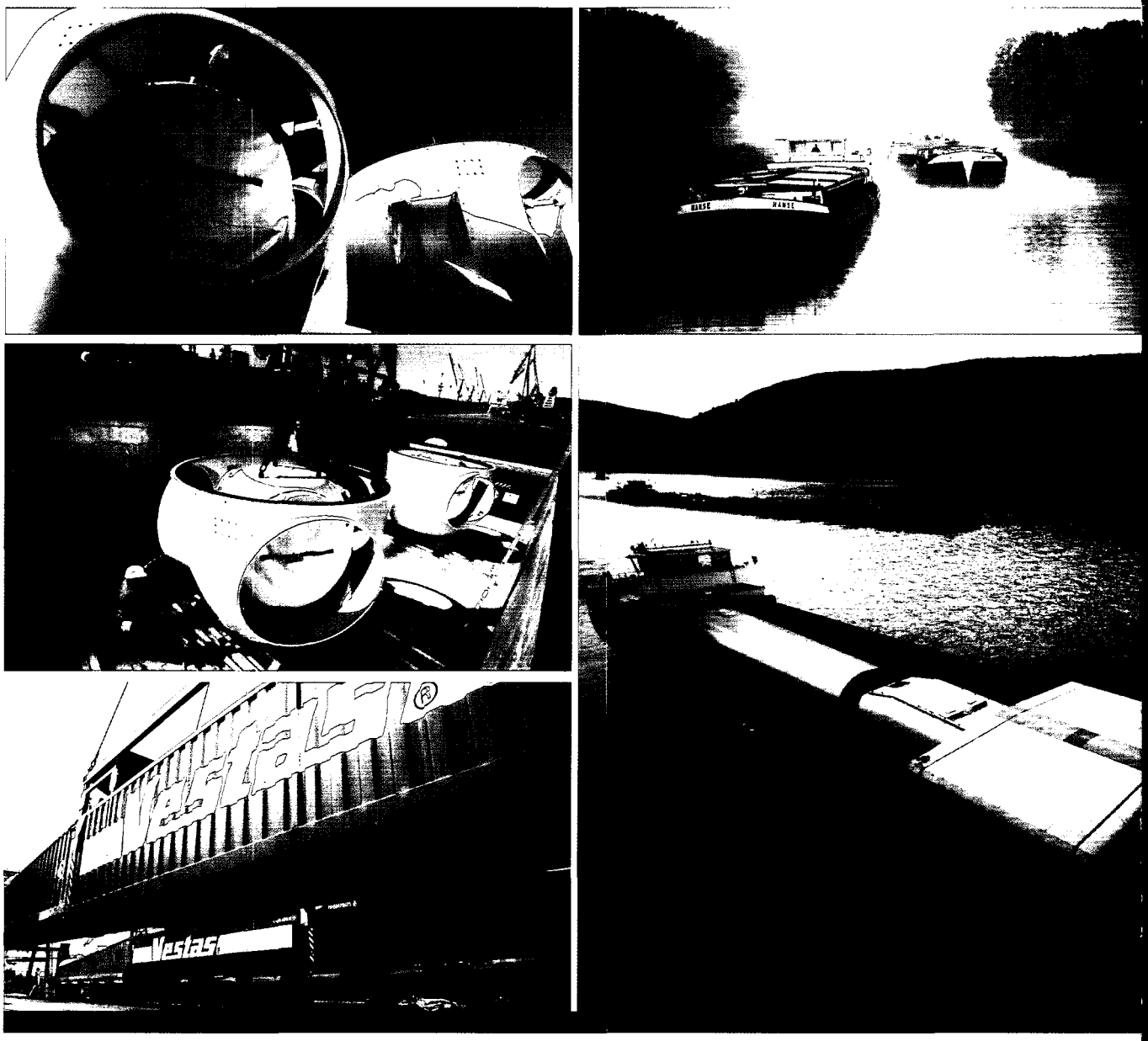
[6] *"Danmark indgår ny kontrakt om køb af CO_2-kreditter", (Denmark enters into new contract for the purchase of CO_2 credits) press release from the Danish Ministry of the Environment, April 2004. Conversion factor: EUR 1 = DKK 7.4381.*

[7] *EU Parliament and Council Directive 2003/87/EF of 13 October 2003.*

Alternative transport solution on the Rhine

Turbines are becoming bigger and bigger – as are the transport operations to turbine sites around the world. Transport on national roads can be problematic. It can be an irritation for the other drivers, authorities can sometimes take a very long time to process the required transport permits, and, finally, road transport generates a degree of environmental impact.

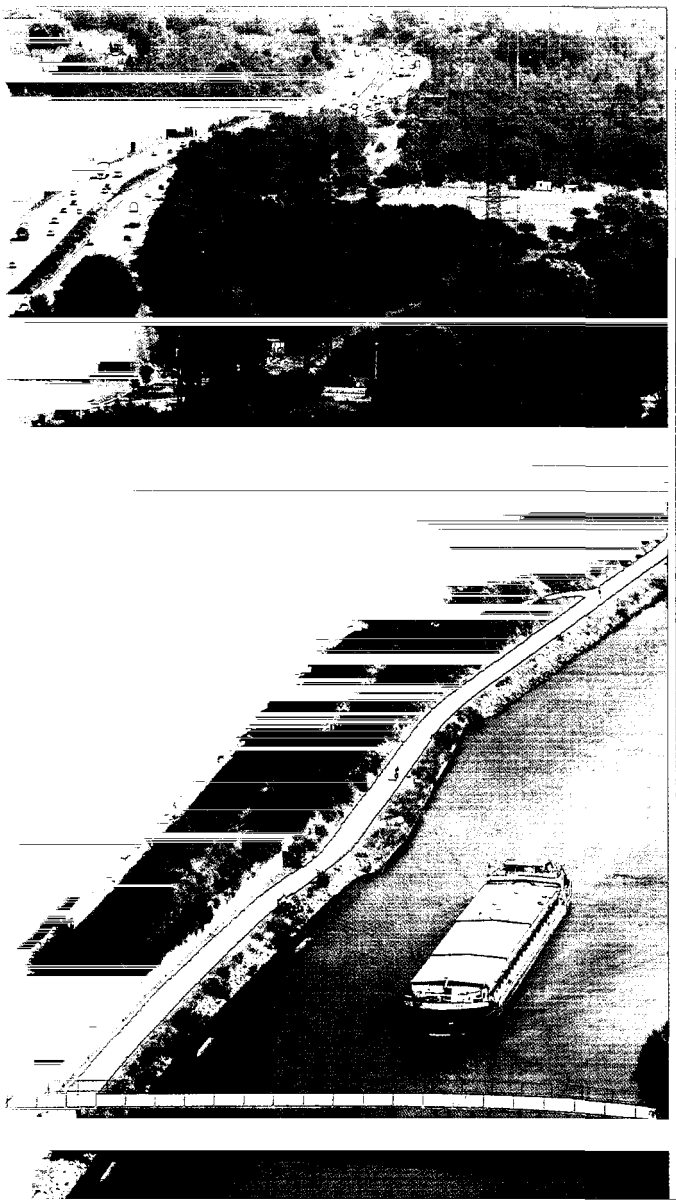
One of the big challenges at present is thus to find alternatives to road transport through Europe. The entire Central European region has a very well-developed networks of canals

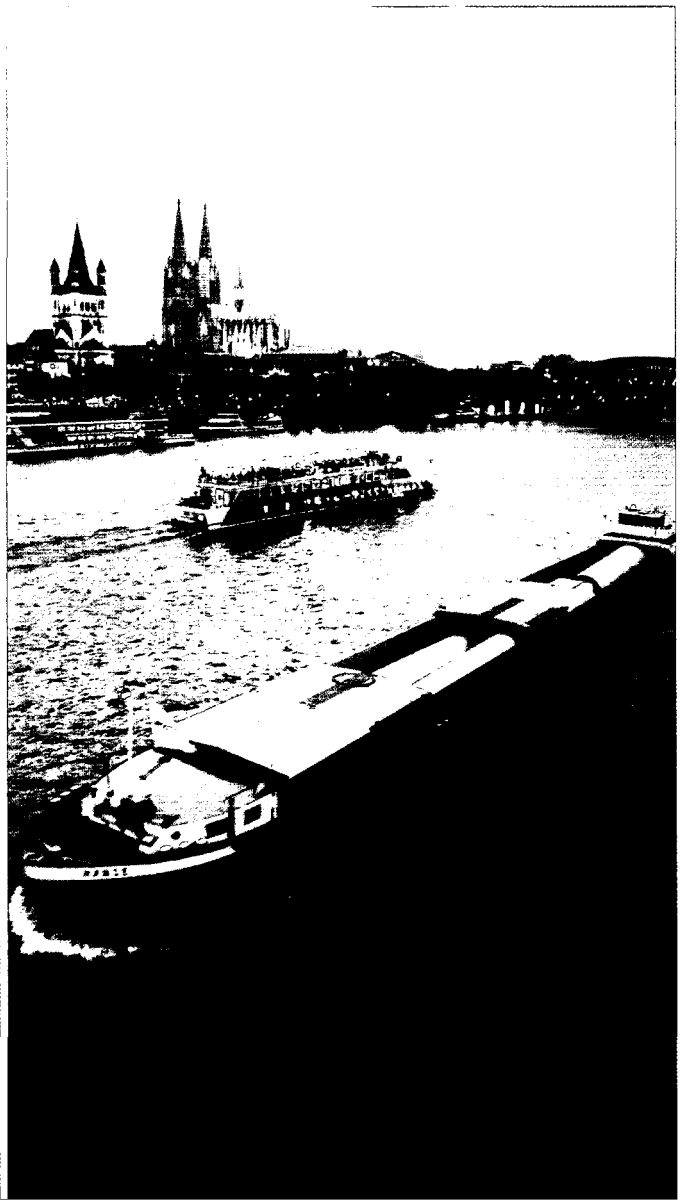


and watercourses, so in 2004, Vestas tested the option of river transport to deliver two V66-1.75 MW wind turbines to a project in Switzerland.

Good currents and little disturbance from waves meant that the trip from the federal state Schleswig-Holstein in Germany to Basel in Switzerland went according to plan.

Vestas considers river transport to be a good alternative to conventional forms of transport. However, there are a number of factors that have an appreciable effect on the profitability of this solution. For example, the turbine site must be close to the landing point to eliminate the need for a long drive to the site. Similarly, the transport time must be taken into account as the barges sail relatively slowly and the route by water is often longer than that by road.





The Nishime site – consisting of 15 V80-2.0 MW wind turbines – was one of the large projects Vestas delivered in Japan in 2004.

The need for wind power will grow strongly in the future

In its latest report, entitled "World Energy Outlook 2004", the International Energy Agency (IEA) forecasts that global energy consumption will grow in step with the global economy. Constant growth in the global economy will therefore produce growth in energy consumption that is expected to increase by approximately 60 per cent from 2002 to 2030.

The IEA expects the share of electricity in the total energy production to increase considerably, so that production of electricity in the period 2002-2030 will double, corresponding to an average annual growth rate of 2.5 per cent. The share of electricity consumption of the total global energy consumption is thus expected to constitute 20 per cent in 2030.

In the same period, the share of the total volume of electricity generated covered by wind power will increase dramatically, from 0.3 per cent in 2002 to 3 per cent in 2030, equivalent to more than 1,600 per cent increase in production.

The IEA thus expects wind power to win market share within the field of electricity generation at the same time as the proportion of total energy generation covered by wind power continues to increase at high rates. This means that wind power will experience significantly stronger growth than other areas in the field of energy generation.

Vestas agrees that electricity consumption will increase, and that the volume of this consumption covered by wind power will also increase appreciably. Vestas considers it positive that the IEA has amended its evaluation of the share of electricity consumption to be covered by wind power in the future. Expectations for the wind power share of total electricity consumption in 2020 has thus tripled in relation to the IEA report entitled "World Energy Outlook 2002".

However, Vestas still considers the IEA forecasts to be on the conservative side. Seen in the light of the increasing need for electricity, the continued development of the efficiency of wind power systems, and improvements in the general competitiveness of wind power, Vestas considers it realistic to assume that wind power will constitute approximately 5 per cent of the global electricity generation over the next 10 years.

New growth centres

International demand for energy is changing geographically. Markets in Western Europe, North America and Japan will account for a smaller share (in per cent) of the global energy volume, while "new" nations such as India and, in particular, China will gradually become more important, cf. figure 2 on page 25.

According to the IEA, China is currently the second largest economy in the world, and it is expected to take first place in 2030. With annual growth rates of around 8-10 per cent, it is expected that China's share of the total global energy consumption will increase to 16 per cent in 2030. This rapid economic growth has already resulted in electricity shortages in certain areas, which could easily become an obstacle to continued economic growth.

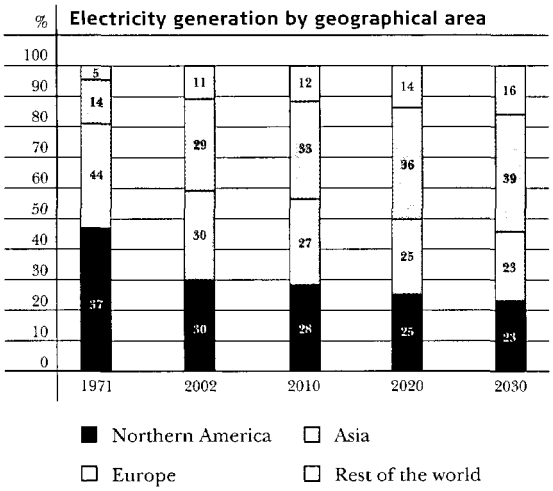
The Chinese government is currently adopting legislation intended to remedy the shortage of electricity and to promote the establishment of sustainable energy installations. The aim is to increase the country's renewable energy capacity to 60,000 MW in 2010 and to 120,000 MW in 2020.[8)]

Vestas considers it very important that China, as potentially the largest consumer of energy in the world in the future, starts work now to adopt protocols for the application of sustainable energy. The same tendency can be observed in a number of other countries in Asia, including India, Korea, Taiwan and the Philippines.

Vestas expects that this will contribute to a considerable increase in the expansion of wind power, and that these countries will

[8)] *"Status of China's Renewable energy development and utilization promotion law – summer 2004", published by Azure International Technology & Development (Beijing) Limited, July 2004.*

Figure 2:



Source: "World Energy Outlook 2004", published by the International Energy Agency (IEA), October 2004.

increase their targets for the use of sustainable energy in step with the development of experience with wind power.

Kyoto Protocol ratified

The increased consumption of energy worldwide has not only a resourcerelated but also an environmental perspective. The incineration of large volumes of conventional fuels results in increased emissions of air pollution. The Kyoto Protocol, the first major climate agreement on emissions of greenhouse gases, is a trail-blazer because it is binding. This means, for example, that the countries which have ratified the protocol have signed an agreement to limit emissions of greenhouse gases in the future. In addition, the protocol has helped to spread the message of the influence of greenhouse gases on climatic changes, at the same time as focus on sustainable energy is increasing.

For the Kyoto Protocol to come into effect, it must be ratified by at least 55 countries with total emissions amounting to at least 55 per cent of the emission level set down in the protocol text. With Russia's ratification in 2004, the agreement came into effect on 16 February 2005, and years of uncertainty surrounding the ratification question came to an end.

The Kyoto Protocol is divided into two phases. During the first phase, which deals with the period 2008-2012, the countries are obliged to reduce their emissions of greenhouse gases in line with a distribution key.[9] The individual countries have separate goals, and as a starting point, countries with a high gross domestic product (GDP) are to implement proportionally greater reductions in their emissions than other countries. Of the 15 EU countries, only France, Sweden, Germany and Great Britain are currently within the targets set, so the other 11 countries have a lot of work to do to meet their obligations.[10] The second phase of the Kyoto Protocol will deal with the years after 2012, but this has not yet been finalised.

Even though the Kyoto Protocol has come into effect, Vestas is of the opinion that nations which consume high levels of energy, such as the United States and China, and which have still not ratified the Kyoto Protocol, should be urged to sign agreements concerning limitations of the emission of greenhouse gases.

Sustainable energy on the agenda in Bonn

"The International Conference for Renewable Energies – renewables 2004" organised by Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH and Deutsche Energie-Agentur GmbH in collaboration with the German Ministry for Business and Employment, was held in Bonn, Germany, from 1 through 4 June 2004. The purpose of the conference was to promote the use of sustainable energy.

In his address to the conference, Svend Sigaard, President and CEO of Vestas, concentrated on the necessity of further extending sustainable energy and of establishing fixed targets for sustainable energy. The text of Svend Sigaard's speech is available online at www.vestas.com under the menu heading "Profile/article archive". The goal for the Bonn conference was to reach agreement on precise targets for sustainable energy. This goal was unfortunately not achieved, but a working group has been set up in which the wind power industry is represented through the European Wind Energy Association (EWEA), the sector organisation. The tasks of this working group include establishing an international political network for the spread of sustainable energy. This network is intended to play a key role in the spread of regional policies for sustainable energy.

Wind and hydroelectric power – a good combination

One of the weaknesses of wind power is that wind power plants do not produce a regular flow of output because production is dependent on the wind blowing. This weakness can, however, be remedied by combining wind power with other sustainable (or conventional) sources of energy.

Wind and hydroelectric power constitutes a particularly good combination. Both technologies are thoroughly tested and their operation is reliable, so the combination of wind and hydroelectric power constitutes optimal exploitation of the resources.

When the wind blows, production from hydroelectric power can be cut back and the surplus power from the wind can thus be stored in the reservoir of the hydroelectric plant. Conversely, when the wind speed drops, hydroelectric production can be increased. This results in stable and pollutionfree electricity generation.

[9] *"Framework Convention on Climate Change", published by the UN, March 1998.*
[10] *"EU15 greenhouse gas emissions decline years of increase", published by the European Energy Agency (EEA), July 2004.*

Wind turbines help to control grids

There is more to the generation of electricity than simply pouring capacity into the grid. Control of grid operation is becoming an increasingly important parameter, especially in countries like Denmark, where approximately 20 per cent of the annual electricity consumption is covered by wind power.

Vestas has therefore developed a range of solutions under the banner of VestasGridSupport™ for, among other purposes, the optimisation of grid control. These solutions make it possible for wind turbines to deal with minor grid disruptions where the current drops, without the turbines having to be restarted manually. The wind turbines can thus improve grid stability and maintain the capacity to restart production immediately after a grid breakdown.

One example of wind turbines being used actively in grid control is that of the 80 V80-2.0 MW offshore turbines at the Horns Reef wind power plant off the west coast of Denmark. The owner, the energy company Elsam A/S, uses this wind power plant to handle fluctuations in demand and production when the person responsible for electricity distribution requests regulation of the electricity production.

Elsam A/S uses the wind turbines for this regulation, because the power produced by a wind power plant can be adjusted much more quickly than that of a coalfired power plant, for example. These regulation options increase the flexibility of the electricity producer. The planned extensions of wind power plants off the Danish coasts will further reinforce the options for grid control, as a larger volume of electricity generated from wind power can be used actively in grid regulation.

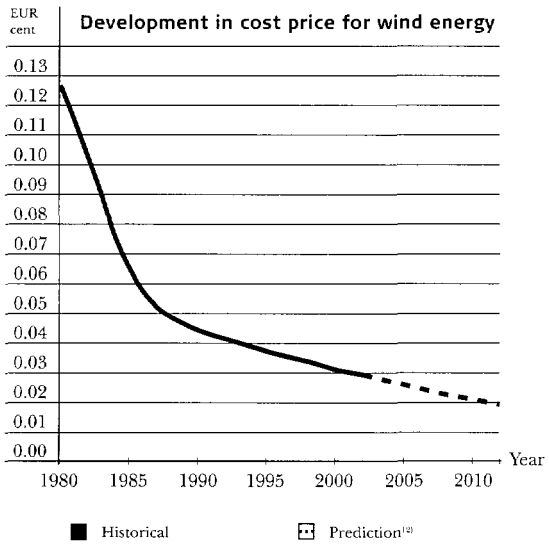
Competitive price

One of the most important parameters for the success of wind power is the cost price per kilowatt hour (kWh) generated. Today, wind power is one of the most competitive forms of sustainable energy. As figure 3 shows, the cost price per kWh has fallen steadily over the past 25 years, and modern wind power plants today operate with a cost price per kWh of a little under EUR 0.03.

This cost price is fully competitive with that of energy generated by most newly established conventional power plants. If additional external costs, including the cost of pollution, are taken into account, wind power becomes even more competitive. Coal in particular is linked to appreciable external costs, which the EU has estimated at between EUR 0.02 and EUR 0.10 per kWh.[11] The external costs for natural gas are estimated at EUR 0.01-0.04 per kWh.

Wind power is thus one of the very cheapest forms of generating electricity if the price of pollution, etc. is added to the cost price for the generation of one kilowatt hour of energy.

Figure 3:



Source: Vestas' calculations are based on the following conditions: 20-year linear depreciation, 6 per cent interest rate, service and maintenance costs set at EUR 0.007 per kWh, airmass density 1.225 kg/m³, average wind speed of 5.4 m/s at a height of 10 metres.

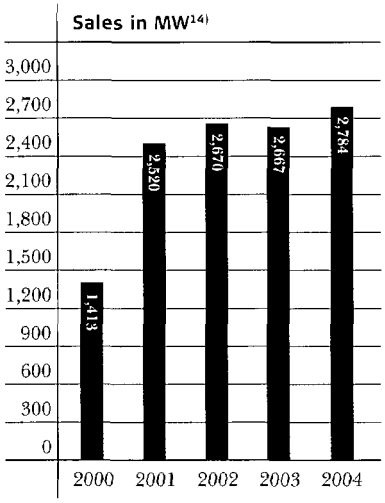
Good market spread ensures increasing market share

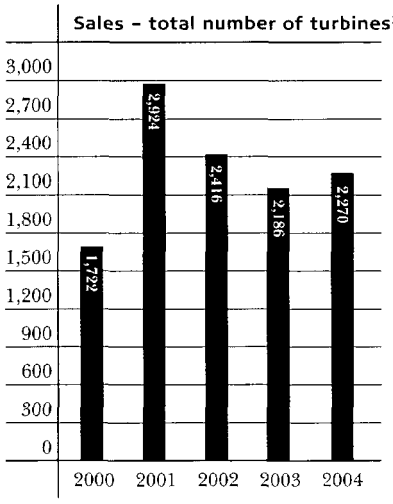
The global market for wind power in 2004 totalled approximately 8,000 MW, which is a minor decrease in relation to 2003. This development is primarily attributable to decreases in Germany and the United States, which were partially offset by an increase in the rest of the world. The German market was distinguished by a more complex environmental approval process, while the American market was affected by a very late extension of the American Production Tax Credit (PTC) scheme.

The total sales of Vestas Technology from Vestas Group companies and Vestas' associated companies amounted to 2,784 MW, an increase of approximately 4 per cent in relation to 2003. Vestas obtained a global market share of approximately 35 per cent, a rise of approximately 2 percentage points on 2003.[13]

Vestas expects strong development in the global market for wind power in 2005. The extension of the PTC scheme and the positive development of a range of European and Asian markets will more than offset the development on the German market. Vestas thus expects the global market to grow by more than 20 per cent in 2005.

[11] *"External Costs", published by the EU Commission, January 2003.*
[12] *3-5 per cent annual kWh price reduction on wind energy.*
[13] *Vestas' sales and market share figures included in this section represent the combined group on a full-year basis.*





Sales in MW[14]	2004	2003	2002	2001	2000
Nordic Region	**36**	**83**	**462**	**158**	**383**
Sweden	33	46	33	50	27
Denmark	3	37	427	104	356
Finland	–	–	2	–	–
Norway	–	–	–	4	–
Other European markets	**1,752**	**1,529**	**1,531**	**1,388**	**786**
Germany	665	831	852	823	415
Spain	316	201	178	239	55
Italy	234	51	146	161	113
Netherlands	166	144	152	40	37
United Kingdom	114	113	47	48	48
Austria	68	96	24	11	7
Portugal	45	32	12	14	6
Greece	43	8	58	21	49
France	38	9	14	1	7
Ireland	36	25	13	4	49
Belgium	12	14	4	1	–
Croatia	6	–	–	–	–
Lithuania	5	–	–	–	–
Switzerland	4	–	–	2	–
Slovakia	–	3	–	–	–
Poland	–	1	30	23	–
Rumania	–	1	–	–	–
Latvia	–	–	1	–	–
Rest of the World	**996**	**1,055**	**677**	**974**	**244**
India	241	171	91	37	20
Australia	188	45	119	1	10
Canada	112	46	92	48	11
New Zealand	107	20	–	–	–
USA	92	493	290	758	94
China	75	59	17	20	24
Japan	74	97	42	87	45
South Korea	47	8	4	1	1
Iran	28	39	15	–	–
Egypt	23	54	–	–	–
Taiwan	4	–	4	–	3
Cuba	4	–	–	–	–
United Arab Emirates	1	–	–	–	–
Jamaica	–	21	–	–	–
Argentina	–	2	1	–	–
South Africa	–	–	2	–	–
Costa Rica	–	–	–	20	–
Chile	–	–	–	2	–
Morocco	–	–	–	–	36
Total world	**2,784**	**2,667**	**2,670**	**2,520**	**1,413**

The Nordic Region

In 2004, Vestas delivered 33 MW to the Swedish market, which is a decrease of 13 MW compared to 2003. Thus, Vestas achieved a market share of approximately 60 per cent – a decrease compared to 2003 when Vestas had a very high market share. The Swedish market for wind power has settled at a stable level and the introduction of green certificates has considerably improved opportunities for planning and financing wind turbine projects. This development and the increase in sales prices for electricity from sustainable sources give Vestas grounds to expect the Swedish market to develop positively in 2005.

In Denmark, Vestas supplied 3 MW to a market that managed a total installed capacity figure of just 7 MW. However, the Danish government has decided to continue to focus on the expansion of wind power. As a result, two new offshore power plants with a capacity of 200 MW each are to be established, with current plans pointing to installation in 2007-2008. At the same time, a new repowering programme for a total installed capacity of 350 MW of landbased turbines has been initiated. This will involve replacing noncontemporary turbines with fewer but more efficient models. Once the programme is complete, wind power will cover 25 per cent of the total Danish electricity consumption. Against this background, Vestas is confident that activities on the Danish market will increase as from 2005.

[14] Vestas' sales figures represent the combined group on a full-year basis.

V80-2.0 MW wind turbines installed near Lemvig, Denmark.

The rest of Europe

In 2004, the German market decreased by more than 600 MW, but despite this, Vestas succeeded in maintaining its position in Germany, which was once again Vestas' largest single market. Vestas delivered 665 MW to Germany in 2004 and achieved a market share of approximately 33 per cent – up around 2 percentage points on 2003. In Germany, alterations to the interpretation of the Bundesimmissionsschutzgesetz (Federal Emission Control Act), resulted in delays to a number of projects as the approval process has become more complicated and more protracted. On account of the delays and the pressure on installation capacity in the fourth quarter of 2004, a number of projects were postponed until the first quarter of 2005. The annual reduction in power sales prices pursuant to the German Renewable Energy Sources Act (EEG) means a decrease in profitability of the projects postponed until 2005, and this may result in further delays or even cancellation of some projects.

Vestas expects Germany to remain a large market in 2005, although at a lower level than in 2004. The German market is expected to start growing again in 2006-2007, when planned offshore projects are scheduled for implementation.

In 2004, the Spanish market lived up to Vestas' expectations. The total market in Spain equalled the level of the German market. On the growing Spanish market, Vestas managed to increase its market share by approximately 1 percentage point to approximately 16 per cent. Vestas delivered 316 MW to Spain in 2004 – an increase of 57 per cent. In 2005, it is expected that the V90 turbine in particular – which is well suited to sites with low, moderate or high winds – will prove its competitiveness. These expectations are further backed by large orders received in the fourth quarter of 2004 for delivery in 2005, cf. announcements No. 38/2004 and No. 48/2004 of 15 October and 29 December 2004 to the Copenhagen Stock Exchange. Vestas expects that the Spanish market will continue to be large and stable, and Vestas is confident that it will continue to expand its position on this market.

The Italian market grew considerably in 2004. This development is due to political clarification of the longterm targets for sustainable energy, and to new legislation concerning the reorganisation and liberalisation of the electricity sector, which has had a positive effect on the market. In 2004, Vestas received large orders in Italy – cf. announcements No. 24/2004 and No. 41/2004 of 19 May and 28 October 2004 to the Copenhagen Stock Exchange – more than quadrupling its deliveries to 234 MW. As such, Vestas maintained its leading position in Italy.

Projects completed in Germany in 2004 included the Friedrich-Wilhelm-Lübke-Koog project, which consists of 16 V80-2.0 MW wind turbines. The German market for wind power is expected to remain large in 2005, although at a level lower than that achieved in 2004. This market is expected to start to grow again in 2006-2007.

Vestas' share of this market totalled approximately 66 per cent – a decrease of approximately 1 percentage point. Vestas expects the Italian market to continue to show stable development. However, the authorities' handling of permits in Sardinia may result in minor delays to a number of projects.

The Dutch market decreased in 2004, but Vestas succeeded in increasing its deliveries to 166 MW, which led the company's market share to increase to more than 80 per cent. Increased activity in the field of repowering onshore, greater focus on the establishment of offshore wind farms, and the stated target of the Dutch government to install 1,500 MW by 2010 all give Vestas grounds to anticipate positive development on the Dutch market.

The British market grew less than expected in 2004. A number of projects have obtained building permits, however, they have not yet materialised. A new planning policy for sustainable energy (PPS22) was adopted in August 2004. PPS22 obliges planning authorities to support rather than hinder the development of sustainable energy. This planning policy combined with the growth potential in the market stemming from the Renewable Obligation Certificate (ROC) with a stated aim of 10 per cent renewable energy in 2010 and 15 per cent in 2015, leads Vestas to maintain very positive expectations for the development of the British market. Vestas' deliveries totalled 114 MW which is at the level of 2003, however, the Group's market share decreased to around 52 per cent. This drop in market share is attributable to the fact that deliveries to onshore projects decreased in 2004, although Vestas still maintains a very high share of the offshore market. With the introduction of the V90 turbine, Vestas expects to win market share again in 2005, when the Group will be delivering V90-3.0 MW turbines to the Barrow offshore wind turbine project and to the Kentish Flats offshore wind turbine project, cf. announcements No. 29/2004 and No. 45/2004 of 23 July and 26 November 2004 to the Copenhagen Stock Exchange. The projects total 90 MW each.

In Austria, the government has cut support for sustainable energy, and an offer system is currently being planned to replace the current subsidy scheme. On this basis, the Austrian market decreased in 2004 and the uncertainty about the future pricing regulations is expected to have a negative effect on the Austrian market going forward too. Vestas delivered 68 MW in 2004 – half the figure for 2003. Vestas' market share was approximately 35 per cent – an increase of approximately 1 percentage point.

On the British market, Vestas has captured a large share of the offshore area. This market share is attributable in part to the delivery of a total of 60 V80-2.0 MW offshore wind turbines to the Scroby Sands and North Hoyle projects. The picture here shows wind turbines at Scroby Sands, approximately 3 km off the coast of Great Yarmouth in Norfolk, in the east of England.

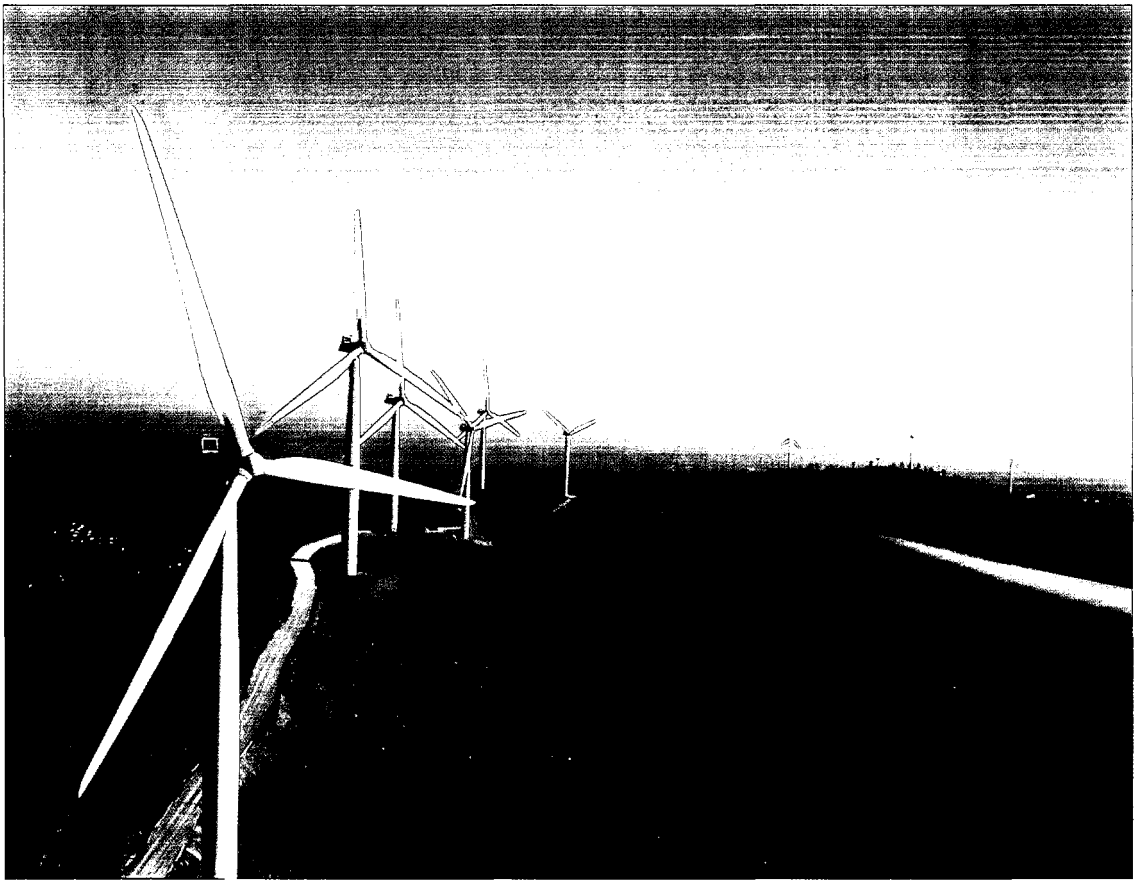
The Portuguese market doubled in 2004. Vestas' total sales to this market increased by 41 per cent, however, its market share decreased by approximately 10 percentage points to around 20 per cent. Vestas' V90 turbine has already proved its competitiveness on this market, from which Vestas has received large orders, cf. announcements No. 27/2004 and No. 47/2004 of 1 July and 20 December 2004 to the Copenhagen Stock Exchange. Vestas expects continued positive development of the Portuguese market in 2005, partly on account of the Portuguese authorities' longterm plans for sustainable energy.

Sales to the Greek market lived up to the expectations in 2004, and Vestas delivered 43 MW – a sixfold increase in relation to 2003. Vestas achieved a market share of approximately 70 per cent compared to approximately 16 per cent in 2003. However, the market is still characterised by delays concerning project financing and obtaining construction permits. This means that projects are still being postponed from one year to the next. Vestas expects a stable development of the Greek market.

The French market grew significantly in 2004. Vestas delivered 38 MW – four times the figure for 2003. Vestas achieved an increase in market share of approximately 11 percentage points to approximately 28 per cent. The French government has a stated target of installing 10,000 MW of sustainable energy by the end of 2010. However, the future market development will depend on the political initiatives taken to fulfill the targets.

In 2004, the Irish market almost doubled. Vestas delivered 36 MW, which is an increase of 44 per cent. The market share dropped to approximately 29 per cent primarily due to the postponement of one single large project. Ireland is currently moving away from small and mediumsized projects towards large projects. The market is dominated by strict requirements for grid connections of wind turbines, and lack of grid capacity is continuously the most important constraint for growth. However, Vestas still expects high growth on the Irish market, but from a low level.

Vestas continues to view Poland as a promising market. Following the accession of Poland to the EU, the Polish market for wind power is expected to develop positively. These expectations were met at the end of 2004, when Vestas received an order to deliver 25 V80-2.0 MW turbines in 2005, cf. announcement No. 49/2004 of 30 December 2004 to the Copenhagen Stock Exchange.



The Serra do Amendoa II project in Macao, Portugal consists of V82-1.65 MW wind turbines.

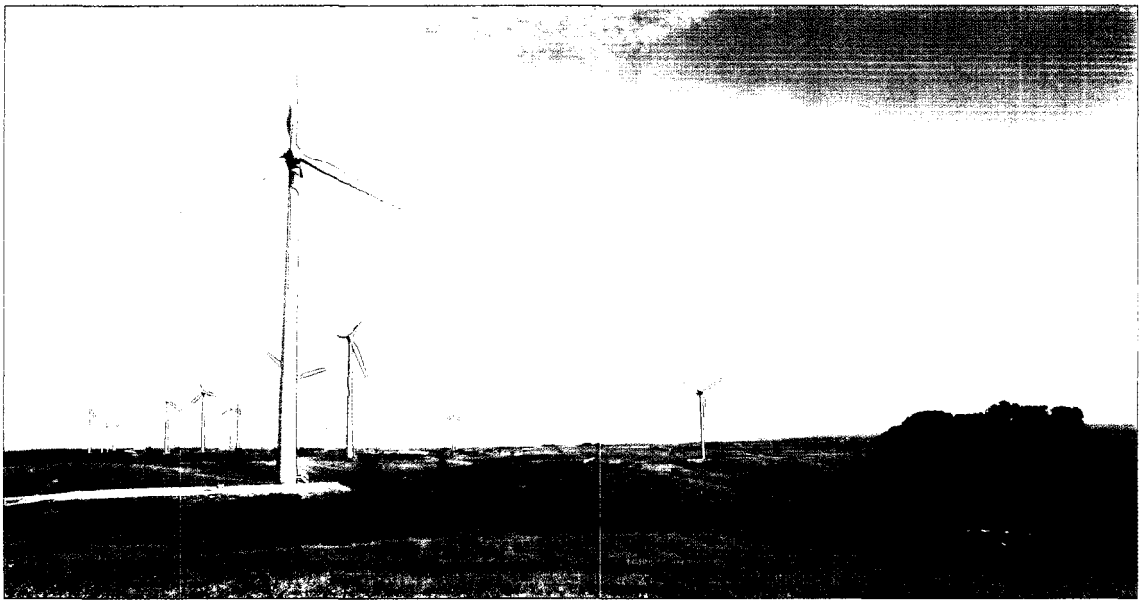
In 2004, Vestas also delivered turbines to Belgium, Croatia, Lithuania and Switzerland – the figures for these countries being 12, 6, 5 and 4 MW. Several of the new EU member states and candidates are showing increased interest in wind energy, and Vestas has good reason to believe that these markets will contribute to the positive development of the European market as a whole in the future.

The Rest of the World

India was one of the markets that showed the highest growth rates in 2004, and expectations for this market remain high. Vestas' deliveries increased by approximately 41 per cent to 241 MW, making India Vestas' largest market outside Europe. Vestas obtained a market share of approximately 30 per cent – slightly down on 2003. This decrease was primarily attributable to periodic staggering of the deliveries. The market is currently developing from being taxdriven to energydriven, where the primary investors are independent power producers and utilities. In addition, a subsidy scheme has been introduced whereby textile companies can receive a 50 per cent refund on the financing costs of investment in wind power. Against this background, Vestas expects India to be one of the markets that develops most positively in the short term.

Vestas obtained large orders in Australia in 2004, clearly highlighting Vestas' strong position on the market – cf. announcements No. 28/2004 and No. 34/2004 of 7 July and 30 August 2004 to the Copenhagen Stock Exchange. The Australian market grew significantly in 2004 and Vestas delivered 188 MW – a fourfold increase in relation to 2003. Vestas thus retained a very high share of the Australian market. In the short term, expectations for the Australian market remain positive although in the longer term there remains some uncertainty about development, as the goal for sustainable energy in the Mandatory Renewable Energy Target (MRET) was neither extended nor raised. However, Vestas anticipates that political initiatives at state and regional level will ensure that Australia will remain an important market in the long term.

Development in Canada remains positive. State and regional initiatives for sustainable energy continue to support stable growth. Vestas secured a number of large orders in Canada during the second half of 2004, cf. announcements No. 31/2004, No. 36/2004, No. 39/2004 and No. 43/2004 of 6 August, 27 September, 18 October and 16 November to the Copenhagen Stock Exchange. These orders – for delivery in 2004-2005 – amount to a total of more than 350 MW, confirming Vestas' competitive strength on the Canadian market. Vestas supplied 112 MW to Canada in 2004, an increase of 143 per cent. This gave Vestas a market share of approximately 75 per cent.



The installation of 46 V66-1.75 MW wind turbines at the Lake Bonney site, Australia contributed to Vestas' delivery of 188 MW to the Australian market – four times the level in 2003. This means that Vestas succeeded in retaining a very high share of the market in 2004. Vestas anticipates that political initiatives at state and regional level will ensure that Australia will remain an important market in the long term.

In New Zealand, Vestas increased its sales fivefold to 107 MW and thus achieved a very high share of the market. Vestas expects that this market, with its great wind potential, will continue to develop positively, and anticipates maintaining a high market share.

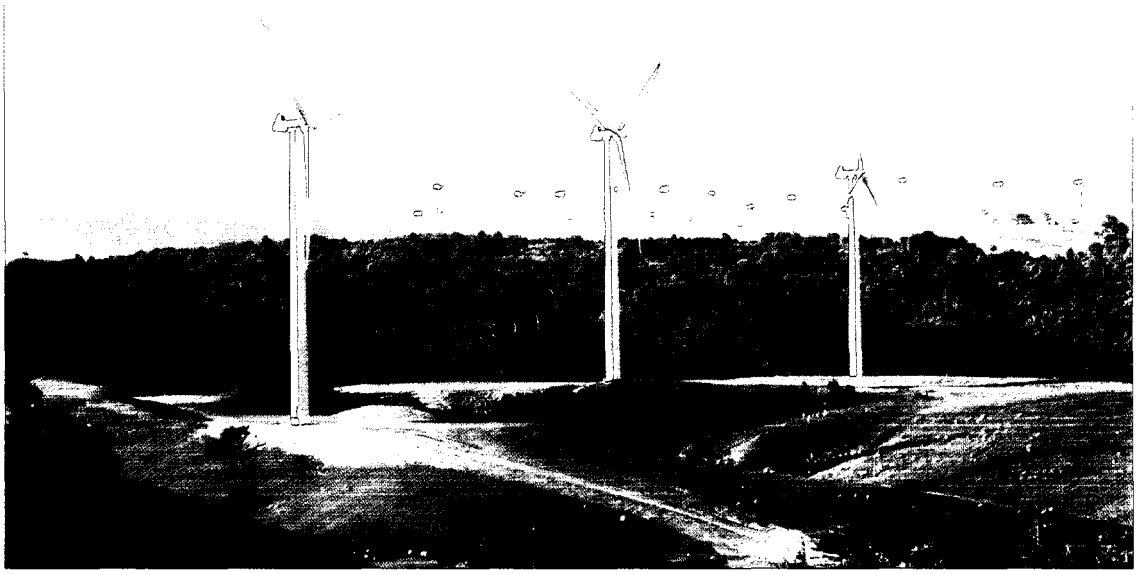
In October 2004 the Production Tax Credit (PTC) scheme in the United States was finally extended until the end of 2005. On account of this late delay in the extension to the PTC scheme, the American market was cut to 389 MW in 2004 – a quarter of its 2003 level. Vestas delivered 92 MW, a drop of 81 per cent. Conditions on the American market were generally difficult in 2004. The huge drop in the size of the market and the plummeting dollar resulted in very tough competition on price. Against this background, it is satisfactory to note that Vestas succeeded in achieving a market share of approximately 24 per cent.

Industry forecasts indicate that 2,000 MW of wind power will be installed in the United States in 2005, which, if accurate, will mean a record year on the American market. However, the weakness of the US dollar combined with increasing steel prices means that projects are becoming more expensive. This naturally puts pressure on project profitability. For this reason, Vestas believes that some of the projects planned will not actually be completed, which involves the risk of the market developing more slowly than industry estimates indicate.

The Chinese market grew considerably in 2004. Vestas delivered 75 MW – an increase of approximately 27 per cent – and obtained a market share of around 38 per cent. The Chinese government passed a new law aimed at promoting the use of sustainable energy. The aim is to increase the country's sustainable energy capacity to 60,000 MW in 2010 and to 120,000 MW in 2020. The law states that consumers are to cover part of the costs for the use of sustainable energy, while utilities are obliged to purchase supplies from sustainable sources of energy. The target of 120,000 MW corresponds to 12 per cent of energy supplies in 2020 stemming from sustainable sources of energy. Vestas expects that wind power will account for a significant portion of this growth. Vestas' positive expectations for the Chinese market were confirmed at the end of 2004, when the Group was chosen to deliver fifty V80-2.0 MW wind turbines to the Jiangsu province, cf. announcement No. 50/2004 of 31 December 2004 to the Copenhagen Stock Exchange.

The Japanese market decreased in 2004, primarily on account of the periodical staggering of projects. Vestas delivered 74 MW, a drop of around 24 per cent and obtained a market share of approximately 28 per cent – a decrease of approximately 7 percentage points. The Japanese market is distinguished by postponements from one year to the next, but the outlook for stable growth is good, although at a moderate level. Vestas expects this development to continue.

Awareness of and interest in wind power has grown in a number of countries in recent years. As a result, Vestas delivered 47 MW in South Korea, 28 MW in Iran and 23 MW in Egypt. In addition, the Group has installed 4 MW in Taiwan, 4 MW in Cuba and 1 MW in the United Arab Emirates.



With deliveries of a total of 107 MW, Vestas quintupled its sales in New Zealand and captured a very large part of the market in 2004. Projects included the delivery of 55 NM72-1.65 MW wind turbines to the Te Apiti project. New Zealand has excellent wind potential, and Vestas expects the market to continue to develop very positively.

The South American market remains very small, but a number of countries are currently working on programmes for the installation of wind power. Vestas has particularly high expectations for Brazil providing the impetus for the markets of South America over the coming 2-5 years.

Generally speaking, the Middle East and North Africa are new and challenging markets. There are good opportunities for establishing wind power plants, but financing the projects and receiving the various permits required constitute a long, difficult process. Therefore, Vestas has only modest expectations for these markets in the short term.

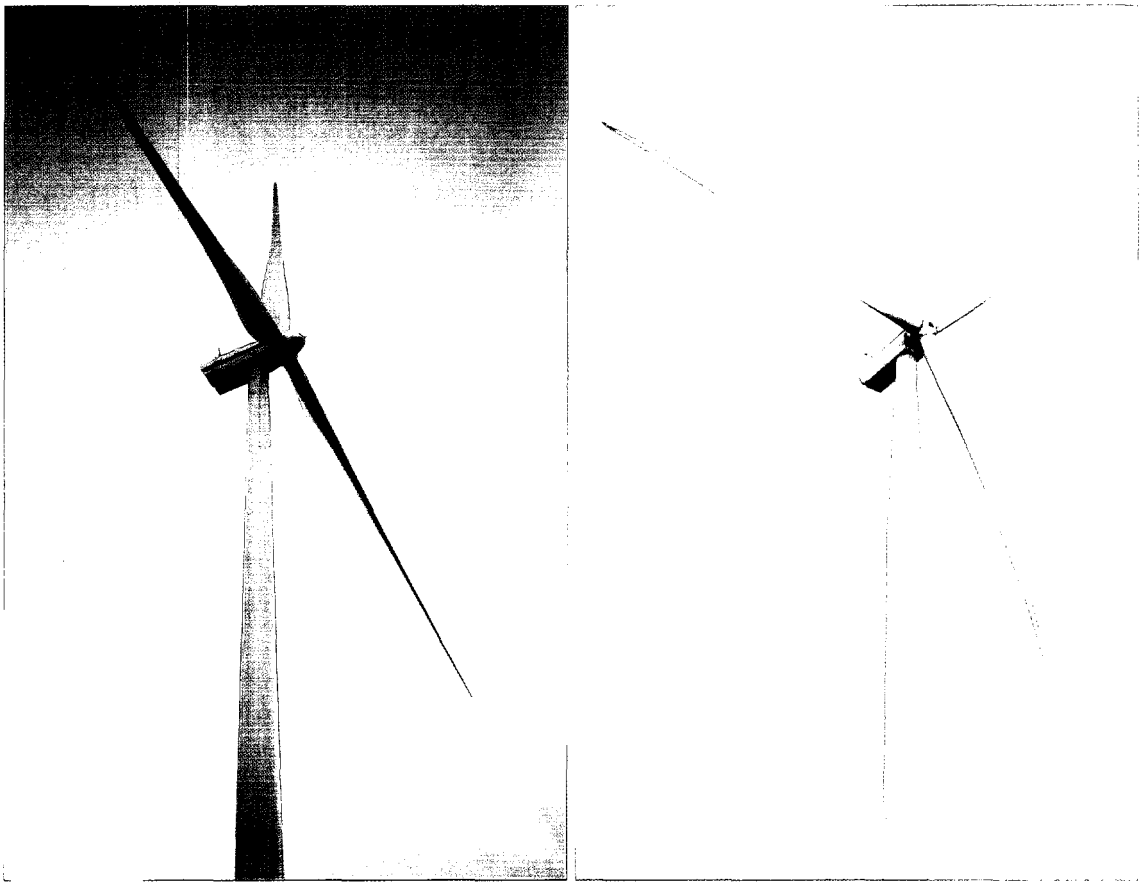
General market development

In general, Vestas expects that the wind turbine industry will continue to be driven by the onshore market. Most of the growth in the immediate future will stem from Europe and North America and India, as well as from China and Australia. In addition to this, there are other markets in Asia in particular that have appreciable potential.

The offshore market for wind power is considered likely to come into its own in the medium to long term. As such, the offshore market share is expected to account for an average of around 10 per cent of annual newly installed capacity for the next five years or so, primarily focused in the waters off the coasts of The British Isles and Northern Europe.

Vestas expects the number of markets for wind power to continue to grow. Similarly, the Group expects several of the smaller markets to develop and thus contribute positively to a continuing increase in market spread, which will help to minimise the effects of the fluctuating American market. For these reasons, Vestas predicts that in the long term, the market for wind power will stabilise.

Against the background of factors including the increase in the number of markets for wind power, Vestas joined in the initiative to found the Global Wind Energy Council (GWEC), which is to function as an umbrella organisation for the existing national and regional sector organisations. The GWEC is to ensure that the wind power industry is represented on equal terms with other forms of energy industries in all global organs and forums that have energy on their agendas.



Vestas has prepared an ambitious product development plan intended to reinforce and extend Vestas' market position. The pictures here show the V100-3.0 MW (left) and the NM110-4.2 MW (being futher developed into a V120-4.5 MW) wind tubines – the very latest additions to Vestas' product range.

Figure 4: **Vestas' product range**

kW	V52
2.0 MW	V80 V82 V90
3.0 MW	V90 V100
4.5 MW	V120

Intensified product development

The combination of Vestas and NEG Micon created a strong technology organisation in Vestas. One of the first significant tasks was to define the future product range. This was accomplished through a concentrated programme in which the existing and most imminent new products were evaluated against a wide range of criteria, such that the most competitive products were selected to continue. Figure 4 presents the product range.

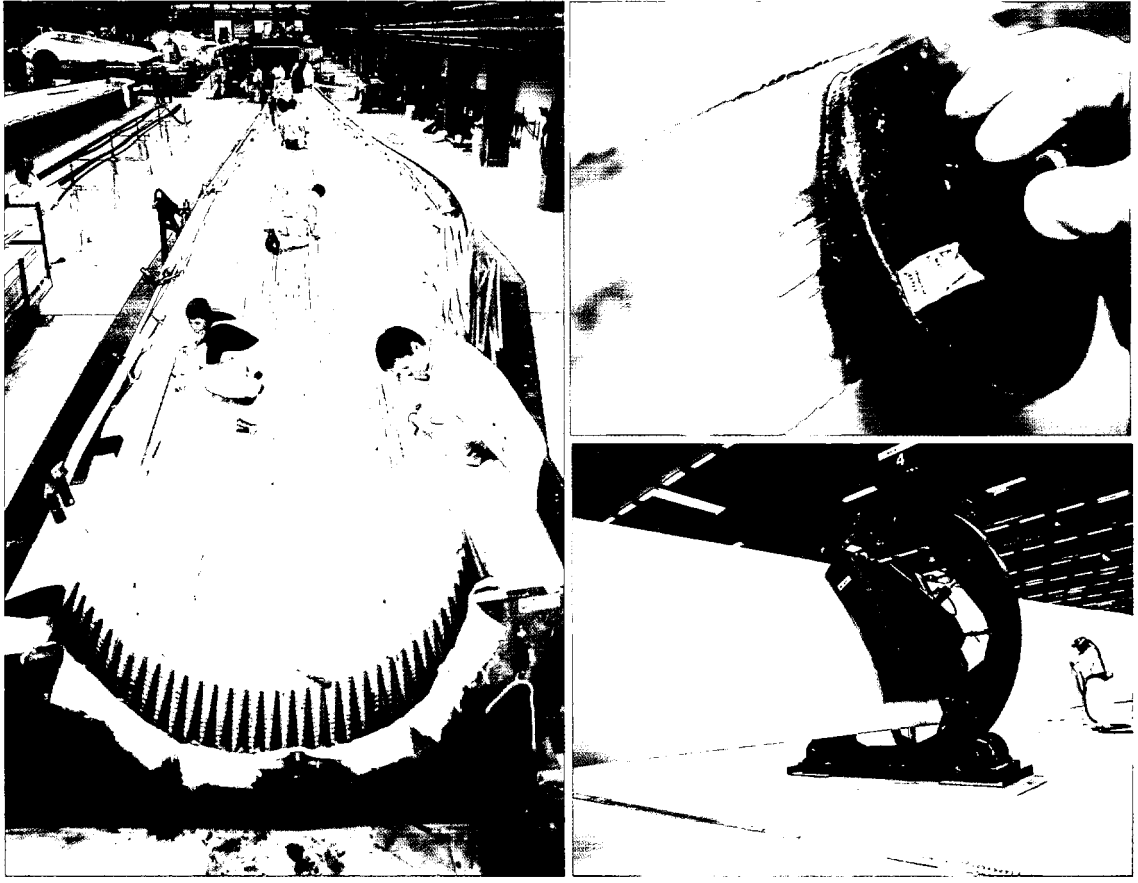
In the wake of the combination, an ambitious product development plan has been drawn up with a view to securing and extending Vestas' market position. The overriding concept of the new product development plan is still to develop wind power systems that can generate optimal electricity quality at the most competitive price with full consideration for safety and quality.

A very important tool in the product development process is integrated product development. The purpose of the process is to make use of all the competences available in connection with product development and to ensure that the final product is optimal in all phases, from production, through installation to operation.

V120-4.5 MW – the offshore turbine of the future

The V120-4.5 MW is the first turbine to feature genuine integration of the combined Group technologies. This turbine has primarily been developed for offshore operation.

One of the factors behind the improved competitiveness is the lighter blades. Moreover, a more intelligent control system contributes to a reduction on the loads on the turbine as a whole. This means that it is possible to use less material to manufacture the tower. At the same time, the amount of material



The combination of the wood/carbonfibre-epoxy concept and Vestas' geometric profiles has appreciable potential for the design and production of cost-efficient blades.

needed for the foundations will also be reduced, thus helping to make the turbine even more competitive.

V100-3.0 MW – the turbine for sites with low and moderate winds

The V100-3.0 MW turbine is a planned development of the V90-3.0 MW model which, with its special construction in which the main axle has been replaced by a giant ring bearing, constitutes a giant technological leap forward for Vestas. The V100-3.0 MW turbine is based on the same technological platform as the V90-3.0 MW model, and extends Vestas' product range with a particularly competitive 3.0 MW turbine for sites with low and moderate winds – both on land and offshore.

Best practice behind the choice of technologies

In addition to the definition of the future product range, the best practice principle was applied to making a range of decisions concerning the technology of the future.

As regards the blades, focus is currently centred on developing the wood/carbon fibre-epoxy concept through the application of Vestas' geometric profiles. This combination has appreciable potential for the design and production of cost-effective blades for the current range and for the wind turbines of the future. This is one of the concepts to be applied in connection with the manufacture of the 59-metre blades for the V120-4.5 MW turbine.

Tower design is also to be optimised on the basis of the new developments implemented in the tower for the V90-3.0 MW model. An important element in this new development is the patented magnet system which, in addition to holding the inner components in place in the tower, makes it possible to design lighter towers as there is no longer a need for welding directly into the tower casing. This initiative also reduces the loads on the foundations and cuts costs for steel.

With regard to the control systems, the remote control and monitoring systems, it has been decided that the future systems and designs will consist of a concept that combines the systems previously used by Vestas and NEG Micon.

The examples listed above will all help to reinforce Vestas' position as the leader on the wind power market and to ensure future competitiveness.

Purchasing and production reflect market requirements

Part of Vestas' strategy has to do with reducing costs in connection with the production of wind turbines, thus improving the competitiveness of wind power. One of the options for minimizing costs is the establishment of local production facilities for wind turbine components to the extent that this results in lower total costs.

Vestas' goal is to develop the area of production in accordance with the positive and stable development of the markets for wind power. This means that decisions concerning the establishment of local production depend to some extent on evaluations of the potential of a market or a region.

One of the regions currently showing strong growth is Australia. As a result, Vestas decided in 2004 to establish a blade factory in Portland, Victoria, to manufacture blades for MW-class turbines. The factory is expected to start production in the second half of 2005 and will initially operate with an annual capacity of 150-200 MW.

In addition, Vestas has decided in principle to go ahead with the establishment of local production facilities in China and North America.

In 2005, Vestas will commence the establishment of a blade factory on the east coast of China – a central position seen in relation to the expected development of the Chinese market for wind energy. From this position there are also good opportunities to ship products to other Asian markets. The factory is expected to start production in the first half of 2006.

As regards North America, Vestas is currently carrying out detailed studies. On the basis of the results of these studies, Vestas will establish local manufacturing of blades in the second half of 2006. This will be in addition to the manufacturing of towers which is already taking place at suppliers in North America and will form part of the endeavours to bring production closer to the coming markets thus balancing sales and production in USD.

In both China and North America, Vestas will balance the expansion of the factories to the development of the market. Fully developed both factories are expected to have a capacity of approximately 1,000 MW.

Vestas' investments in the three new factories mentioned above are expected to total around mEUR 80-100 in 2005 and 2006. The establishment of these three factories constitutes an expansion of the existing capacity and is therefore not expected to have any significant influence on the existing factories in Europe.

In connection with the combination of NEG Micon and Vestas, the Group has experienced an extremely positive development in the Spanish market and this development is now followed up by further production in Spain. In 2005 it has thus been decided to stop the assembly of nacelles in Randers, Denmark, and extend the production in Vivero/Galicia in Spain.

Global sourcing

The purchase of components from external suppliers is a major expense for Vestas. As a result, the Group constantly focuses on obtaining the best possible purchase prices through working relationships with the most competitive partners at a global level.

One of the most important factors as regards prices of raw materials is currency exchange rates. In order to be as independent as possible of any one specific currency, Vestas works continuously on globalising its sourcing. As part of this approach, initiatives have been implemented with a view to establishing purchasing functions in several parts of the world.

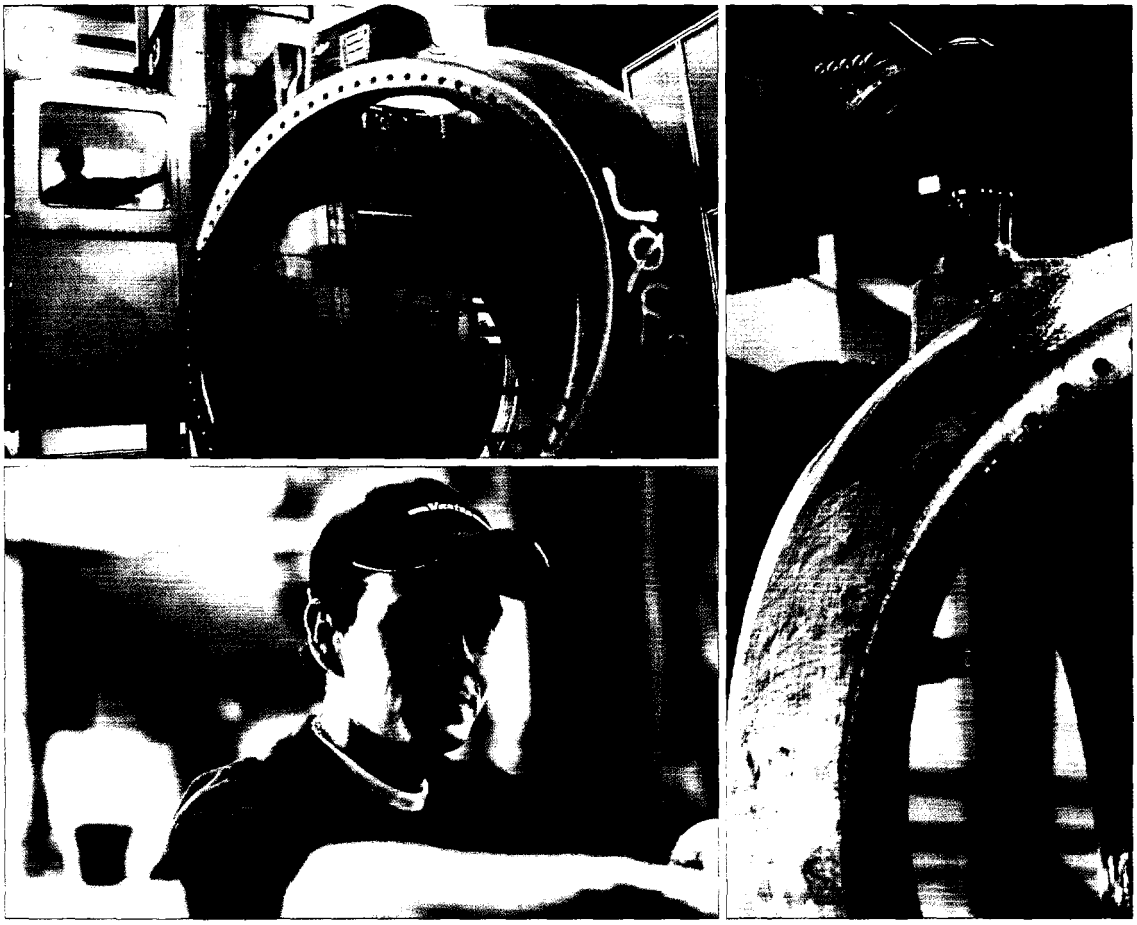
In the United States and China in particular, investigations into the opportunities for purchasing locally have increased in intensity with the establishment of local purchasing organisations under the auspices of the global production units for nacelles and towers. Vestas anticipates that the establishment of its own production facilities in North America and China will increase the return on the ongoing partnership negotiations with suppliers regarding purchases in currencies other than the euro. This development is completely natural and a number of Vestas' most strategically important partners are similarly establishing facilities in different parts of the world.

Adaptation of production facilities

As part of the drive to optimise and develop competitive advantages in the field of control systems, the decision was taken to build up a skills centre in Hammel, Denmark. The primary purpose of this centre is to work with integrated product development and production design in close collaboration with Technology and Production Engineering.

This will ensure that application of the very latest production technologies is started before the technology behind the products – after prototype, 0-batch and production maturity – is transferred to the other factories. These factories have been optimised for flexible volume production with short run-through times based on a line production concept with the employees working in production teams. This form of organisation ensures a high level of integration in the development process along with an elevated degree of utilisation and efficiency at the factories.

In the field of blade production, 2004 showed continued extension of the production capacity as well as the initiation of blade production on the basis of the wood/carbon fibre-epoxy concept.



The increasing price of steel naturally has a negative effect on the cost price per kWh and on Vestas' earnings, but relatively speaking, it should have a positive effect on Vestas' competitiveness as the weight of Vestas' turbines in relation to MW capacity is the lowest in the industry.

The Vestas hub factory in Skagen, Denmark, runs a part of the Group hub production in an integrated production setup. A range of competences have been gathered together so that the factory commands all the processes necessary to manufacture hubs. At the same time, the runthrough time for a hub manufactured at this factory is shorter than for production based on disparate competences.

In 2004, the nacelle factory in Taranto, Italy, was upgraded to a skill centre for Vestas' assembly of kW-class nacelles. One of the effects of this is that the factory now has responsibility for the development of production processes.

Production of 3.0 MW nacelles in Ringkøbing, Denmark, has been converted to a line assembly system. This form of production has been used successfully for more than a year on 2.0 MW nacelle assembly in Viborg, Denmark. Line assembly means shorter runthrough times and thus greater flexibility for customers. It also improves occupational health and safety conditions. For these reasons, it is likely that the concept will be transferred to other nacelle factories.

Again in 2004, a good deal of attention was focused on the production and sourcing of towers, an aspect intensified by the increasing prices of steel and transport. The aim is to ensure that the competences and know-how which exist at Vestas' own tower factories are put to optimal use in the sourcing of towers and related products worldwide.

An appreciable increase in steel prices

As steel is an important component in Vestas' production of turbine components, the appreciable increases in the price of steel in 2004 have translated into higher purchasing prices for Vestas in 2005. The increasing price of steel naturally has a negative effect on the cost price per kWh and on Vestas' earnings, but relatively speaking, it should have a positive effect on Vestas' competitiveness as the weight of Vestas' turbines in relation to MW capacity is the lowest in the industry.

Events after the end of the financial year

By announcement No. 40/2004 of 25 October 2004 to the Copenhagen Stock Exchange, Vestas revealed that President and CEO of Vestas Wind Systems A/S, Svend Sigaard has informed the Board of Directors that he wishes to resign from his position after the General Meeting on 25 April 2005 – on 1 June 2005 at the latest.

At the same time the Board of Directors announced that Ditlev Engel has been appointed new President and CEO of the company. Ditlev Engel comes from Hempel A/S where he has been employed for 20 years and during the latest 4½ years as Managing Director.

Ditlev Engel will take up the position of President and CEO of Vestas Wind Systems A/S as from 1 May 2005. Already from 1 March 2005, Ditlev Engel has had the opportunity to learn about Vestas' strategy, business processes and organisation as well as to become acquainted with some of the Group's business units, cf. announcement No. 02/2005 of 21 January 2005 to the Copenhagen Stock Exchange.

In February and March 2005, Vestas has received orders totalling the supply and commissioning of 234 units of V80-1.8 MW wind turbines for projects in the USA, cf. announcements No. 04/2005, No. 05/2005 and No. 06/2005 of 28 February, 3 March and 15 March to the Copenhagen Stock Exchange. The wind power plants will be commissioned by 31 December 2005.

These are the only significant events that have taken place subsequent to balance sheet date that are not otherwise included in this annual report.

Expectations for the future

Vestas has long-term expectations for the continued expansion of wind power and forecasts average annual growth rates in excess of 25 per cent measured in installed MW.

The market for wind power is still politically sensitive. This means that there is still a risk that fluctuations may arise, especially as sales to markets with less stable political climates are to be envisaged in the future. In 2005, Vestas expects the global market to grow by more than 20 per cent.

The extension of the PTC-scheme and the positive development in a number of European and Asian markets have resulted in a satisfactory order backlog at the beginning of 2005. The total backlog of firm and unconditional orders corresponds to approximately 5 months of average production.

The expectations for 2005 are based on firm and unconditional orders, including deliveries for the American projects announced in February and March, a number of conditional orders and planned projects.

The expectations for 2005 are unchanged compared to announcement No. 07/2005 of 21 March 2005 to the Copenhagen Stock Exchange. In 2005, Vestas expects to generate a turnover of bnEUR 3.0-3.2. The EBIT margin for 2005 is expected to total approximately 4 per cent. However, it must be noted that a continuing volatility in markets, exchange rates and finance opportunities may affect turnover and profits.

Investments in 2005 in tangible fixed assets are expected to total mEUR 160-170. Net working capital at the end of the year is expected to amount to 30-35 per cent of the net turnover for the year.

The management expects that the Group's existing credit and guarantee facilities are sufficient to secure the Group's operation in 2005. As part of the Group's financing strategy, it is still under consideration whether the Group's credit lines during 2005 should be extended also to comprise additional long-term financing concepts.

The business activities of the Vestas Group are subject to a number of risks, which means that a degree of uncertainty is linked to all forecasts. More detailed information concerning the risks is included in the paragraph describing "Special risks".

The results of the Vestas Group are subject to seasonal fluctuations, which are generally attributable to the nature of the projects. Historically, turnover tends to be higher in the second half of the financial year. The management thus expects 30-35 per cent of the turnover forecast for 2005 to be generated in the first six months.

For this reason, and on account of the desire to make optimal use of available production capacity, production is expected to balance out over the year as a whole. As a result, the balance sheet totals at 30 June 2005 are likely to show high inventories.

The above mentioned prognosis for 2005 is based on the Group's current accounting policies. Vestas expects to inform about the effect of new accounting policies (IFRS) in connection with the publication of the half-year results 2005.

Special risks

General risks

Vestas sells its products to a number of geographical markets, and the composition of these markets may change significantly from year to year. This is due in particular to the fact that the global market for wind power is influenced by changes in public energy policy and planning issues as well as lack of stability in energy policy measures in certain countries. Moreover, exchange rate fluctuations are considered a factor which may result in shifts in the markets. However, experience has shown that as a rule it is possible to identify the relevant political trends and, to an extent, predict the effect these will have. On this basis, a policy of strong market diversification can help to even out major fluctuations in overall demand.

The wind power industry in general, and Vestas in particular, are both characterized by large customers demanding large projects, including offshore wind power plants. The turnover, profit, and cash flow of the Vestas Group may thus be influenced considerably by the timing of new large orders, just as problematic weather conditions, etc. in connection with the

installation of wind power plants may result in significant delays.

Furthermore, as a result of the continued increase in activities and seasonal fluctuations, the demands for effective production and project management are still increasing in order to avoid delays, etc. and the resulting costs and binding of liquidity in working capital.

Wind turbine projects are typically based on a specific project financing scheme. Fluctuations in the interest charged on such financing can be important for the buyer's decision to implement a project.

Vestas believes that it will continue to be important to focus on product and production development in order to maintain the Group's high share of the international market. Development initiatives are based on known and tested technology, and Vestas does not expect technological leaps within the wind power industry. Likewise, the management is not of the opinion that the introduction of new technology in the industry will threaten Vestas' position in the market.

Patents and protection of registered designs etc. are becoming increasingly common within the wind power industry, but Vestas believes that product development within the Group can use the technologies necessary to the Group's continued competitiveness in the future.

Vestas is a vertically integrated wind turbine manufacturer with a substantial level of in-house production. This increases competitiveness yet reduces the ability to adapt in the short term. The high level of in-house production also makes Vestas a capital intensive company, which, in turn, places high demands on both working and investment capital.

Components purchased externally are primarily supplied by large suppliers with good international reputations, and Group policy is to maintain two or more suppliers for each component.

The Group faces the risk of fluctuations in the price of raw material, eg. steel, copper, and composite material, which may significantly affect the Group's result and cash flow. The Group seeks to alleviate these risks by entering into long-term cooperation and price agreements with suppliers.

In order to reach the planned future synergies within especially purchase and production, requirements are still being made to an effective implementation of the combination with NEG Micon.

Warranty provisions

The quality assurance systems used by Vestas and Vestas' suppliers are in line with the ISO 9000 standard and generally function well. In spite of this, the new development and the appreciable growth in volume involve a risk that the products supplied may contain errors that have not been detected in the usual test procedures.

Vestas normally provides a 2-5 year product warranty on new products. To cover warranty obligations, a sum is set aside in connection with each sale. The size of this sum depends on the type of products and the duration of the warranty period. Subsequently, periodic measurements are carried out based on a total assessment of the required provision.

In addition hereto, in some markets Vestas offers service and warranty packages with a term of typically 10-15 years. The content of the packages varies, but usually includes a payment from the customer of a sum per kilowatt hour produced during the term of the warranty. These packages do not, in general, affect the warranty provisions as, depending on the content of the packages, Vestas has covered the warranty risk by means of an assurance.

Financial risks

Currency risks

In principle, the business activities of the Vestas Group involve a range of currency risks linked to the purchase and sale of goods and services in foreign currencies.

The policy of the Vestas Group is to hedge exchange rate risks at the same time as a commitment in foreign currency is agreed. However, only the net exposure for each individual currency is hedged. These exchange rate risks are hedged as far as possible via foreign exchange forward contracts and currency swap agreements.

Exchange rate regulation of investments in overseas subsidiaries and associated companies is taken directly to shareholders' equity. Exchange rate risks in this regard are not hedged, as the Group believes that continuous exchange risk hedging of such long-term investments is not the optimal solution with regard to balancing risk against cost.

Interest risks

The primary interest rate risk of the Vestas Group consists of interest rate fluctuations, which may influence the Group's debt and leasing obligations. The management of interest rate risks involves current supervision of terms and maximum interest rate exposure in respect of the Group's net debt. Efforts are being made to limit interest rate risks through the use of hedging.

Credit risks

The Vestas Group is exposed to credit risks in connection with deliveries to customers in a number of countries throughout the world. However, the Group's debtors are generally covered by secure forms of payment such as letters of credit, bank guarantees and credit insurance.

Shareholders and the stock exchange

The share capital of the company consists of a single class of shares. The shares are listed on the Copenhagen Stock Exchange. At the end of the year, there were 87,803 shareholders in the company registered by name, representing 92.2 per cent of the share capital.

The number of shareholders registered by name has increased by approximately 60 per cent from 2003 to the end of 2004. This increase should be seen in the context of the increase in the company's share capital in the amount of DKK 26,179,414, corresponding to the 26,179,414 shares used as payment for the company's acquisition of shares in NEG Micon A/S.

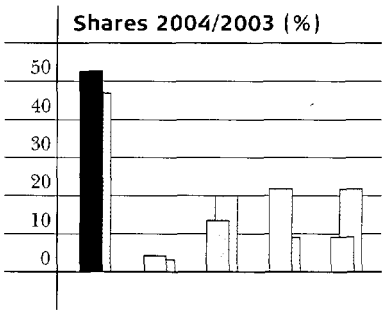
With a view to creating a stronger capital base for the consolidated Group, a further capital increase was implemented in May/June 2004, generating proceeds of approximately mEUR 283. As a result, the company's share capital was expanded in 2004 by a total of DKK 69,907,207, equivalent to 66.5 per cent.

Pursuant to section 28, subsections a and b of the Danish Companies Act, the following shareholders have notified the company that they hold more than 5 per cent of the share capital:

- Franklin Resources, Inc., California, USA (19.98 per cent at 8 March 2005)
- Arbejdsmarkedets Tillægspension (The Danish Labour Market Supplementary Pension – ATP), Hillerød, Denmark (6.40 per cent at 7 March 2005)
- Aktieselskabet Schouw & Co., Aarhus, Denmark (5.09 per cent at 7 March 2005)

Against the background of the combination of Vestas and NEG Micon and the changes in the composition of the Group management, the Board of Directors is considering implementing incentive programmes in 2005.

Figure 5:



	2004	2003
Denmark	53%	47%
Scandinavia excl. Denmark	4%	3%
Europe excl. Scandinavia	13%	20%
Others	22%	8%
Not registered by name	8%	22%

The figure shows the geographical distribution of shares.

Corporate governance

Corporate governance, defined as "the system used to lead and control a business", is largely built into the requirements on Boards laid down in the Danish Companies Act. Vestas Wind Systems A/S operates a two-tier management system, in which the Board of Directors and Board of Management manage the company's affairs.

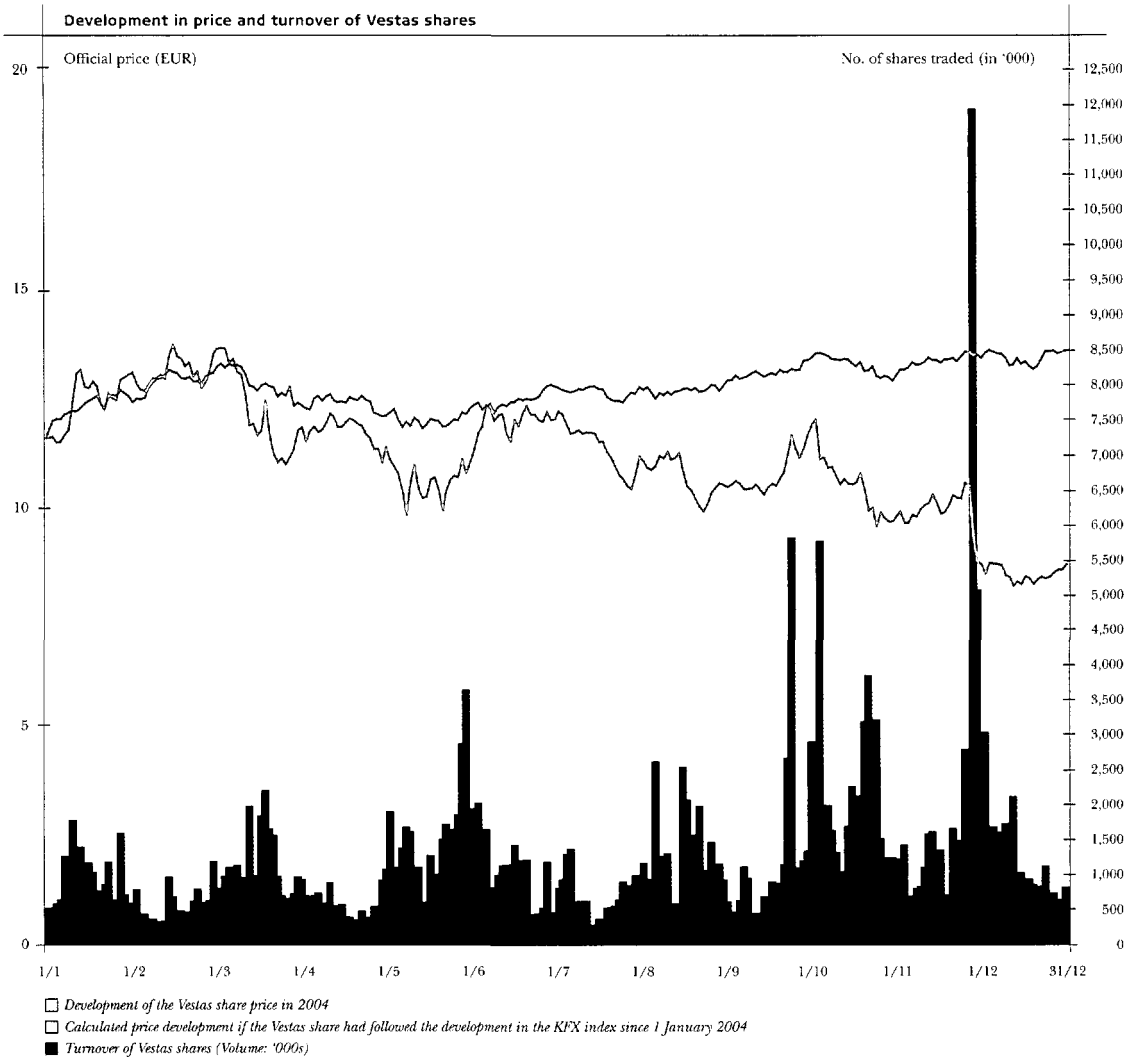
The Board of Directors deals with the overall management of the company, including appointing the Board of Management, ensuring responsible organisation of the company's business, establishing the company strategy and evaluating the applicability of the company's capital contingency programme. The Board of Management deals with the day-to-day running of the company, observing the guidelines and recommendations issued by the Board of Directors.

A high level of international consensus has been reached in recent years concerning what actually distinguishes good corporate governance. The international initiatives have laid the foundations for a more detailed and precise set of rules adapted to national business and company structures. The Board of Directors of Vestas Wind Systems A/S has examined the company's management system against the background of the report entitled "Anbefa-linger for god selskabsledelse i Danmark" (Recommen-dations for good corporate governance in Denmark) prepared by the Nørbyudvalget (Nørby Committee) – a committee set up by the Danish Ministry of Commerce. The Board has noted that the practices of Vestas Wind Systems A/S already conform to a large number of the recommendations from this committee.

The Board of Directors consists of six external members – with broad international experience in corporate management – elected by the General Meeting for one year at a time, as well as three employee representatives elected by and among the Group's employees in accordance with the relevant Danish legislation. The articles of association of the company contain no limitations on the number of times a member may be elected to the Board of Directors. It is the opinion of the Board of Directors that seniority in itself is not a decisive criterion, but that high seniority – and thus, great experience – can prove of considerable benefit to the company. Seen in the light of the development of the company, including the combination of Vestas and NEG Micon in 2004, and the expectations for future growth, continuity in the composition of the Board of Directors has proved to be a major advantage for the company, and the Board considers there to be a continued need for this. On the Annual General Meeting 25 April 2005 the six external members currently serving on the Board of Directors will be standing for re-election.

The Board of Directors has taken note of the general trend on stock exchanges where quarterly reports are recommended. The activities of the company are largely project-oriented, and this may cause major short-period fluctuations. Therefore the decision not to publish quarterly reports is maintained. As in previous years, Vestas Wind Systems A/S will continue to provide information on the general market situation on a quarterly basis.

Further information on the management system of Vestas Wind Systems A/S can be found on www.vestas.com under "Investor Relations/Corporate Governance".



In 2004, the share price decreased from EUR 11.72 to EUR 8.77. The average daily turnover in 2004 a approximately mEUR 11.7. This corresponds to an average daily turnover of approximately 0.8 per cent of the applicable market value. The Vestas shares are now included in the KFX index, the indexes Morgan Stanley Capital International (MSCI) Denmark -, Europe - and World Index, Dow Jones Sustainability World Indexes (DJSI World), Dow Jones STOXX Sustainability Indexes (DJSI STOXX), the indexes Standard & Poor's Europe 350 - and Global 1200 Index, the indexes FTSE4Good Europe - and Global Index, Nordic Sustainability Index and Öko-Aktien-Index nx-25.

Risk management

Vestas works in a structured manner to control a wide range of the risks to which the company is exposed.

From an organisational perspective, a risk management organisation has been set up, which refers to the Group legal department. At group level, work is done on the development and maintenance of general risk management tools, including risk policy, insurance programmes and risk reporting. The Group's central risk management function is supported by a network of employees who, in the separate business units, have local responsibility for implementing and reporting on risk management tasks. The risk management organisation is also supported by working relationships with a range of external advisors.

The risk management organisation works with many different types of risks. These include risks that can be insured against, and at Group level the company has established an insurance programme that covers the risk exposure usual for the Group's activity. This exposure includes manufacturer's liability, material damage, loss of operation, project completion, transport and erection of wind power plants. Moreover, the Group has taken out insurance policies to cover buildings, fittings, furnishings and inventories, machinery, loss of operation, and industrial injuries. The Group also maintains all insurance policies that are required by law or are considered appropriate for any other reason. The management is of the opinion that this coverage is sufficient to meet all significant claims.

In parallel with the risk management organisation, Vestas' Group-wide quality assurance organisation works on the continuous improvement and control of products and processes. The quality assurance organisation is run by a Group function that reports to the President and CEO. Finally, a central function has been established within the sales organisation, the primary task of which is to collate information about product complaints of all kinds as well as knowledge about the solutions to the various types of complaints.

Furthermore, Vestas strives to reduce the risk of error through the general collaboration structures that have been set up in many areas of the company. This applies, for example, to the company's organisation of production teams, where experience from pilot projects has shown that this form of collaboration generates a range of benefits including improved quality of the end product.

The goal of the management is to achieve internal controls of a high standard. These controls are based on written policies, business processes and procedures. Systems and internal controls can only be set up with a view to limiting the risk of conscious or unconscious errors, they cannot rule them out completely. The management is of the opinion that there has been nothing to suggest that these controls and systems have been inadequate at any time during the past financial year.

Dividend policy

In general, the intention of the Board of Directors is, in future, to recommend a dividend of 25-30 per cent of the net result for the year. However, distribution of dividends will always be decided with due consideration for the Group's plans for growth and liquidity requirements. With reference to the capital increase implemented in 2004, the Board of Directors recommends to the General Meeting that no dividend be paid for the financial year 2004.

Investor relations policy

An important element of Vestas' strategic goals is to be a trustworthy partner in all matters. This involves ensuring the publication of timely and factual information about Vestas and the wind power industry. In addition, Vestas strives to be visible and accessible to current and potential investors, an approach that is expected to keep interest in the Vestas share at a high level.

Simultaneously, the goal for continued satisfactory financial results is important. This is expected to be achieved by focusing on core business, the spreading of markets and the development of competitive products. This is expected to result in continued growth at the same level as the growth of the wind power market as a whole.

Vestas holds information meetings for the press, analysts and investors in connection with accounts reporting and the like.

It is Vestas' goal that www.vestas.com should serve as a comprehensive source of information for both current and potential investors. The company web site contains a wealth of information, including all announcements to the Copenhagen Stock Exchange, presentations of the accounts for recent years, and a variety of publications such as product brochures and the customer magazine "VestasGlobal". The site also contains a list of investment banks that deal with analysis of the Vestas share.

In order to give all shareholders the opportunity to "attend" the company's information meetings and telephone conferences, these are webcasted on the company web site. As a result, many more of the existing and potential shareholders in the company have the opportunity to follow – or subsequently acquaint themselves with – the contents of such events.

Financial calendar

30 March 2005	Publication of Annual Report 2004
30 March 2005	Presentation meeting for investors, analysts and the press in Copenhagen (incl. telephone conference and webcast)
31 March 2005	Presentation meeting for investors, analysts and the press in London
4 April 2005	Presentation meeting for investors, analysts and the press in New York
8 April 2005	Convening for General Meeting and distribution of Annual Report 2004
25 April 2005	Annual General Meeting
26 May 2005	Publication of information regarding first Quarter 2005
26 May 2005	Telephone conference
25 August 2005	Publication of interim financial statement for the first half-year of 2005
25 August 2005	Presentation meeting for investors, analysts and the press in Copenhagen (incl. telephone conference and webcast)
29 August 2005	Presentation meeting for investors, analysts and the press in London
31 August 2005	Presentation meeting for investors, analysts and the press in New York
24 November 2005	Publication of information regarding third Quarter 2005
24 November 2005	Telephone conference

General Meeting

The Annual General Meeting will be held on 25 April 2005 starting at 5 p.m. at Randershallen in Randers, Denmark.

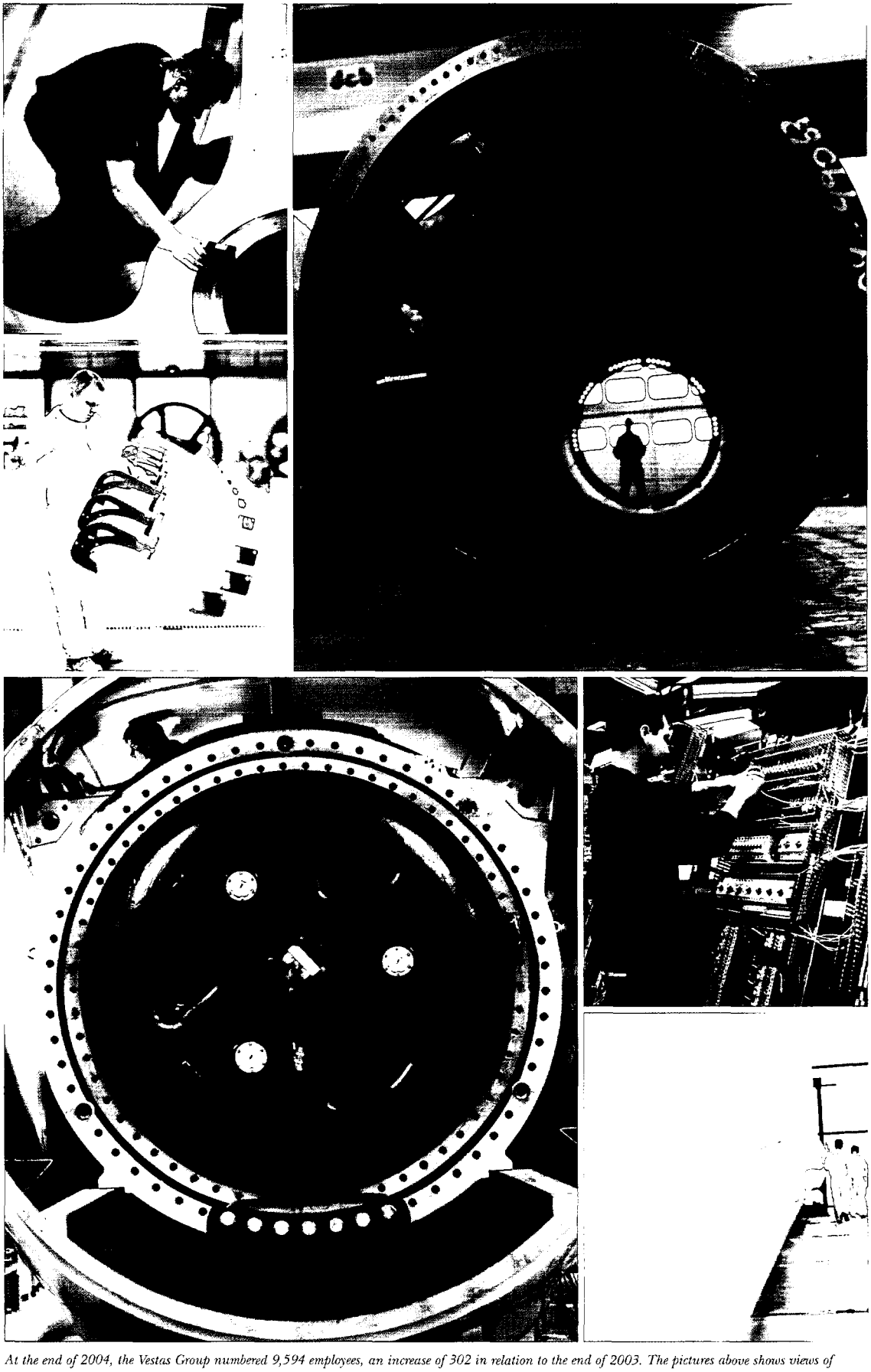
The Board of Directors expects to propose an authorisation for the company to acquire treasury shares up to a total nominal value of 10 per cent of the company's share capital in the period until the next Annual General Meeting.

Furthermore, the Board of Directors expects to propose the following changes to the company's Articles of Association:

Article 3(4) is proposed to be annulled as the authority to acquire shares in NEG Micon A/S was only valid until 31 December 2004. Article 3(5) is proposed to be annulled as the Board of Director's authority to increase the Company's share capital has been exercised. As a consequence thereof, Article 3(6) should be amended to Article 3(4) and in Article 3(6), first item should be amended from "In the event of capital increases pursuant to Article 3(1) – 3(5)..." to "In the event of capital increases pursuant to Article 3(1) – 3(3) ...". Moreover, in Article 3(6), the fourth item should be amended from "... laid down in Article 3(1) – 3(5)..." to " ... laid down in Article 3(1) – 3(3)...".

Annulment of Article 3a, in that the subscription rights were not exercised before 1 December 2004, on which date they ceased to be valid.

Annulment of Article 3b, in that the subscription rights will not be exercised before 1 April 2005, on which date they will cease to be valid.



At the end of 2004, the Vestas Group numbered 9,594 employees, an increase of 302 in relation to the end of 2003. The pictures above shows views of Vestas' various production units.

Announcements to the Copenhagen Stock Exchange issued in period 1 January 2004 - 30 March 2005

Date	No.	
05.01.2004	01	Vestas Wind Systems A/S' quarterly statement for Insiders' holding of Vestas shares as per 31 December 2003
19.01.2004	02	Extension of Vestas' share exchange offer to the shareholders of NEG Micon
30.01.2004	03	Date for publication and presentation of Annual Report
05.02.2004	04	NEG Micon changes the date for announcement of the 2003 annual report. More than 70 per cent have accepted Vestas' Share Exchange Offer to the shareholders of NEG Micon
19.02.2004	05	Extension of Vestas' Share Exchange Offer ('Share Extension Offer') to the shareholders of NEG Micon until 4 March 2004
23.02.2004	06	The combination of Vestas and NEG Micon will take place
05.03.2004	07	More than 95% of the shares have been tendered in Vestas' voluntary share exchange offer (the 'Voluntary Offer') to the shareholders in NEG Micon
12.03.2004	08	Mandatory share exchange offer to the shareholders in NEG Micon
17.03.2004	09	Announcement regarding the Annual Report 2003
17.03.2004	10	Large order for Vestas in Australia
31.03.2004	11	Election of company employee representatives for the Board of Directors of Vestas Wind Systems A/S
02.04.2004	12	Vestas' quarterly statement for Insiders' holding of Vestas shares as per 31 March 2004
14.04.2004	13	The English competition authorities approve the combination of Vestas Wind Systems A/S and NEG Micon A/S
14.04.2004	14	NEG Micon A/S has sold its holding of treasury shares
15.04.2004	15	Announcement on changes in Insiders' holding of Vestas shares
20.04.2004	16	Election of Group representative for the Board of Directors of Vestas Wind Systems A/S
21.04.2004	17	Result of Vestas' mandatory share exchange offer (the 'Mandatory Share Exchange Offer') to the shareholders of NEG Micon
21.04.2004	18	Annual General Meeting of Vestas Wind Systems A/S, on 21 April 2004 at 5:00 p.m.
22.04.2004	19	Announcement on changes in Insiders' holding of Vestas shares
27.04.2004	20	Notice requesting redemption of shares in NEG Micon A/S
30.04.2004	21	Vestas' statement for Insiders' holding of Vestas shares as per 28 April 2004
30.04.2004	22	Vestas receives large order for V90 turbines to the German market
11.05.2004	23	Vestas announces the rights issue offering circular
19.05.2004	24	Vestas receives large orders for the Italian market
11.06.2004	25	Rights issue in Vestas fully subscribed
14.06.2004	26	Vestas' statement for Insiders' holding of Vestas shares as per 11 June 2004
01.07.2004	27	Vestas receives orders in Portugal and Greece
07.07.2004	28	Vestas receives order in Australia and establishes blade factory
23.07.2004	29	Vestas selected as supplier for 90 MW offshore wind project in the UK
04.08.2004	30	Date for publication and presentation of half-year report 2004
06.08.2004	31	Vestas receives order for V80-1.8 MW wind turbines in Canada
09.08.2004	32	Order in the US and adjustment of expectations for 2004
18.08.2004	33	Interim financial statement for the first half year 2004 (1 January - 30 June 2004)
30.08.2004	34	Large order for Vestas in Australia

Date	No.	
24.09.2004	35	Change to the Board of Management of Vestas Wind Systems A/S
27.09.2004	36	Vestas to supply additional 25 units of V80-1.8 MW wind turbines in Canada
01.10.2004	37	Vestas' statement for Insiders' holding of Vestas shares as per 29 September 2004
15.10.2004	38	Vestas receives large orders in Spain
18.10.2004	39	Vestas receives order for a 150 MW wind power plant in Canada
25.10.2004	40	Changes in the Board of Management of Vestas
28.10.2004	41	Vestas receives large order for the Italian market
11.11.2004	42	Telephone conference on 26 November 2004 at 3 p.m. (CET)
16.11.2004	43	Vestas receives large order in Canada
19.11.2004	44	Vestas receives order for 36 units of V82 wind turbines in Nebraska, USA
26.11.2004	45	Quarterly information – 3rd Quarter 2004
03.12.2004	46	Vestas receives large orders in Spain
20.12.2004	47	Large Portuguese order for V90-3.0 MW wind turbines
29.12.2004	48	Vestas receives order for 27 units of V90-1.8 MW turbines in Spain
30.12.2004	49	Vestas selected as supplier for the largest wind farm in Poland
31.12.2004	50	Vestas receives large order for China and establishes local blade factory
04.01.2005	01	Vestas' quarterly statement for Insiders' holding of Vestas shares as per 1 January 2005
21.01.2005	02	Supplementary information regarding the change in the Board of Management of Vestas Wind Systems A/S
28.01.2005	03	Date for publication and presentation of Annual Report
28.02.2005	04	Vestas receives order for 67 units of V80-1.8 MW wind turbines for Texas, USA
03.03.2005	05	Vestas receives order for 84 units of V80-1.8 MW wind turbines for expansion of a project in Oklahoma, USA
15.03.2005	06	Vestas receives another large order for V80-1.8 MW wind turbines in the USA
21.03.2005	07	Vestas adjusts expectations for 2004 and 2005

Group structure

Vestas Wind Systems A/S

(Nom. capital DKK 174,911,173)

Production units

Vestas Nacelles A/S
(Nom. DKK 343,000,000)

- **Vestas Machining A/S**
- **Vestas Assembly A/S**
  - Vestas Nacelles Italia S.r.l.
  - Vestas Nacelles Australia Pty. Ltd.
  - Vestas Nacelles Spain S.A.
- **Windcast Group AS**
  - Guldsmedshyttan Bruks AB
  - Lidköping Sjuteri AB
  - Eissengiesserei Magdeburg GmbH
  - Kristiansand Jernstøperi AS
    - Valle Modelverksted AS

Vestas Blades A/S
(Nom. DKK 91,000,000)

- **Vestas Blades Deutschland GmbH**
- **Vestas Blades Italia S.r.l.**
- **Vestas Blades UK Ltd.**
- **Vestas Blades Australia Pty. Ltd.**

Vestas Control Systems A/S
(Nom. DKK 11,000,000)

- **Vestas Control Systems Spain S.L.**

Vestas Towers A/S
(Nom. DKK 55,000,000)

Sales & Service units

Vestas Americas A/S
(Nom. DKK 41,000,000)

- **Vestas - American Wind Technology, Inc.**
- **Vestas - Canadian Wind Technology, Inc.**
- **Vestas Mexico S.A.**
- **Vestas Brasil Ltda.**
- **Vestas Argentina S.A.**

Vestas Central Europe A/S
(Nom. DKK 57,000,000)

- **Vestas Deutschland GmbH**
- **Vestas - Nederland Windtechnologie B.V.**
- **NEG Micon Holland B.V.**

Vestas Northern Europe A/S
(Nom. DKK 14,000,000)

- **Vestas - Celtic Wind Technology Ltd.**
- **Vestas - Scandinavian Wind Technology A/S**
- **Vestas Vind Svenska AB**
- **Vestas Poland Sp.z.o.o.**

Vestas Asia Pacific A/S
(Nom. DKK 33,000,000)

- **Vestas - Australian Wind Technology Pty. Ltd.**
- **Vestas New Zealand Wind Technology Ltd.**
- **Vestas Japan KK**
- **Vestas China Ltd.**
- **Vestas - Danish Wind Technology A/S**

Vestas Mediterranean East A/S
(Nom. DKK 14,000,000)

- **Vestas - Italian Wind Technology S.r.l.**
- **Vestas Hellas S.A.**

Vestas Mediterranean West A/S
(Nom. DKK 49,100,000)

- **Vestas Eólica SAU**
- **Vestas France SAS**
- **VestasPor - Servicos de Technologia Eólica Lda.**

Other subsidiaries and associates

NEG Micon A/S
(Nom. DKK 267,110,270)

- **NEG Micon India Ltd.**
- **Global Renewable Energy Partners A/S (GREP)**
- **NEG Micon Holding Company Ltd.**
  - NEG Micon UK Ltd.
  - Aerolaminates Ltd.
  - Thorfinn "A" Ltd.

Wind Power Invest A/S
(Nom. DKK 25,000,000)

Vestas RRB India Ltd.
(Nom. DKK 56,200,000) (49%)

Vestas Technology UK Limited
(Nom. GBP 90,000)

Information about the company

CVR-No.

10 40 37 82

Company address

Vestas Wind Systems A/S
Alsvej 21
8900 Randers
Denmark

Board of Directors

Bent Erik Carlsen, Chairman
Arne Pedersen
Kim Hvid Thomsen (employee representative)
Svend Åge Damgaard Andersen (employee representative)
Jørgen Huno Rasmussen
Torsten Erik Rasmussen
Jørn Ankær Thomsen
Freddy Frandsen
Jesper Søndermark (employee representative)

Board of Management

Svend Sigaard, President and CEO
Henrik Nørremark, Executive Vice President and CFO
Mogens Filtenborg, Executive Vice President and CTO
Jens Anders Jensen, Executive Vice President and CSO
Knud Andersen, Executive Vice President and CPO

Solicitors

GORRISSEN FEDERSPIEL KIERKEGAARD
H.C. Andersens Boulevard 12
1553 København V
Denmark

Kromann Reumert
Sundkrogsgade 5
2100 København Ø
Denmark

Auditors

PricewaterhouseCoopers
Statsautoriseret Revisionsinteressentskab
Rønnebærvej 1
7400 Herning
Denmark

KPMG C.Jespersen
Statsautoriseret Revisionsinteressentskab
Værkmestergade 25
8100 Århus C
Denmark

Banks

Nordea Bank Danmark A/S
Strandgade 3
0900 København C
Denmark

Dresdner Kleinwort Wasserstein
Riverbank House
2 Swan Lane
London EC4R 3UX
Great Britain

Societé Generale
29, Boulevard Haussmann
75009 Paris
France

The Bank of Tokyo-Mitsubishi, Ltd.
12-15 Finsbury Circus
London EC2M 7BT
Great Britain

Barclays Bank Plc.
54 Lombard Street
London EC3P 3AH
Great Britain

Vestas obtained large orders in Australia in 2004, clearly highlighting Vestas' strong position on the market. The Australian market grew significantly in 2004 and Vestas delivered 188 MW. The picture here shows the Woolnorth site on Tasmania, Australia.

The members of the Board of Directors and the Board of Management have stated that they hold the following fiduciary positions in other Danish and foreign companies and organisations.

Board of Directors

Bent Erik Carlsen (59 years), Chairman
Director, A. P. Møller
Entered the Board in September 1996.

Chairman of the Boards of:
- A/S Em. Z. Svitzer
- Aktieselskabet Roulunds Fabriker
- Balti ES Ltd., Estonia
- Dansk Industri Syndikat A/S
- Maersk Air A/S
- Maersk Aircraft A/S
- Maersk Container Industri, China
- Mærsk Container Industri AS
- Norfolk Holding B.V., the Netherlands
- Rosti A/S
- Rotrex A/S
- Roulunds Holding A/S
- Star Air A/S

Member of the Board of:
- Dansk Supermarked A/S

Arne Pedersen (59 years)
President and CEO, SIPCO Surface Protection Inc.
Entered the Board in April 1995.

Chairman of the Boards of:
- Bladt Industries A/S
- Brancheforeningen Danske Maritime (Danish Maritime Association)
- DanTruck-Heden A/S
- DiviTech A/S
- K.P. Komponenter A/S
- Mühlhan Surface Protection International GmbH, Germany
- P.N.E. Steel A/S
- Århus Værft A/S

Member of the Boards of:
- Dansk Industris hovedbestyrelse (The General Council of the Confederation of Danish Industries)
- Hammerum Stainless A/S
- Petersen og Sørensen Motorværksted A/S
- Mühlhan A/S

Other positions of trust:
- Chairman of Industriens Branchearbejdsmiljøråd (Industrial Occupational Health Committee)

Kim Hvid Thomsen (41 years)
Elected by Group employees
Entered the Board in May 1996.

Deputy Chairman of the Board of:
- Metal Skjern-Ringkøbing

Member of the Board of:
- Skjern Tekniske Skole

Svend Åge D. Andersen (45 years)
Elected by Company employees
Entered the Board in May 1996.

Jørgen Huno Rasmussen (52 years)
President and CEO, FLSmidth & Co. A/S
Entered the Board in January 1998.

Chairman of the Boards of:
- Aktieselskabet af 1. januar 1990
- FFE Invest A/S
- FFE Minerals Corporation, USA
- FLS Plast A/S
- FLSmidth Airtech A/S
- FLSmidth Inc., USA
- FLSmidth Ltd., India
- FLSmidth Materials Handling A/S

Deputy Chairman of the Boards of:
- Dansk Eternit Holding A/S
- Scion-DTU A/S

Member of the Boards/committee of representatives of:
- Dan Indian Holding ApS
- FLS miljø a/s
- FLS Real Estate A/S
- Industriens Arbejdsgivere i København (The Copenhagen Industries Employers' Federation)
- Tryg i Danmark smba

Torsten Erik Rasmussen (60 years)
Managing Director, Morgan Management ApS
Entered the Board in January 1998.

Chairman of the Boards of:
- Amadeus Invest A/S
- Bekaert Handling Group A/S
- Best Buy Group A/S
- uni-chains A/S

Deputy Chairman of the Boards of:
- A/S Det Østasiatiske Kompagni
- Bang & Olufsen A/S
- JAI A/S
- TK Development A/S

Member of the Boards of:
- Acadia Pharmaceuticals Inc., USA
- Arvid Nilsson A/S
- Bison A/S
- Coloplast A/S
- ECCO Sko A/S
- JAI Group Holding ApS
- Louis Poulsen El-Teknik A/S
- Louis Poulsen Holding A/S
- Louis Poulsen Lighting A/S
- NatImmune A/S
- Oase Outdoor ApS
- Outdoor Holding A/S
- Scandinavian International Management Institute (SIMI) Fonden
- Schur International A/S
- TKD Nordeuropa A/S
- Uni-Chains Holding A/S
- Vola A/S
- Vola Holding A/S

Jørn Ankær Thomsen (59 years)
Attorney at Law and partner, Gorrissen Federspiel Kierkegaard, Director, Galten Midtpunkt A/S
Entered the Board in April 2004.

Chairman of the Boards of:
- Aida A/S
- Aktieselskabet af 26. november 1984
- Aktieselskabet Schouw & Co.
- Bodilsen A/S
- Bodilsen Holding A/S
- Carlsen Byggecenter Løgten A/S
- Carlsen Supermarked Løgten A/S
- Danish Industrial Equipment A/S
- Dansk Biogas Technology A/S
- Danske Invest Administration A/S
- DB 2001 A/S
- Fibertex A/S
- F.M.J. A/S
- Frima Vafler A/S
- GAM Holding A/S
- Ghana Impex A/S
- Givesco A/S
- Investeringsforeningen BG Invest
- Investeringsforeningen Danske Institutional
- Investeringsforeningen Danske Invest
- Investeringsforeningen Danske Invest Almen Bolig
- Investeringsforeningen Danske Invest Select
- Investeringsforeningen Profil Invest
- K.E. Mathiasen A/S
- Krone Erhvervsinvestering A/S
- Krone Kapital A/S
- Martin Professional A/S
- Ortopædisk Hospital Århus A/S
- Pipeline Biotech A/S
- Placeringsforeningen BG Invest
- Scanad Udviklingsbureau A/S
- Schouw Finans A/S
- Schouw Leasing A/S
- Specialforeningen Danske Invest
- Specialforeningen Danske Invest Institutional
- Søndergård Give A/S
- Th. C. Carlsen Løgten A/S
- TV-Holding A/S

Deputy of the Boards of:
- A/S P. Grene
- Elopak Denmark A/S

Member of the Boards of:
- ASM Foods AB
- Carletti A/S
- Dansk Chokoladefabrik A/S
- DBC International A/S
- GFK Holding A/S
- GFKJURA 883 A/S
- Valor Denmark A/S

Freddy Frandsen (60 years)
Managing Director, Aalborg Industries A/S
Entered the Board in April 2004.

Chairman of the Boards of:
- Aalborg Industries B.V., the Netherlands
- Aalborg Industries K.K., Japan
- Aalborg Industries Ltd, Hong Kong
- Aalborg Industries Ltd, China
- Aalborg Industries Ltd, South Korea
- Aalborg Industries S.A., Brazil
- Provinsindustriens Arbejdsgiverforening (The Federation of Employers in the Provincial Industry)
- PT Aalborg Industries, Indonesia

Deputy Chairman of the Boards of:
- Hans Følsgaard A/S
- Hans Følsgaard Fonden
- Aalborg Universitet (Aalborg University)

Member of the Boards of:
- Dansk Industris Hovedbestyrelse (The General Council of the Confederation of Danish Industries)
- Industriens Pensionsforsikring A/S
- IndustriPension Holding A/S
- Svejsemaskinefabrikken Migatronic A/S

Other positions of trust:
- Chairman of Dansk Industris Afsætnings- politisk Udvalg (Committee on International Market Policy)
- Member of Dansk Industris Forretningsudvalg (The Executive Committee of the Confederation of Danish Industris)

Jesper Søndermark (42 years)
Elected by Group employees
Entered the Board in April 2004.

Board of Management

Svend Sigaard, (47 years)
President and CEO
Entered the Board in January 1992.

Chairman of the Boards of:
- Club 8 Company A/S
- Denka Holding A/S
- Kvik Holding A/S

Member of the Board of:
- DONG A/S

Henrik Nørremark, (38 years)
Executive Vice President and CFO
Entered the Board in March 2004.

Mogens Filtenborg, (48 years)
Executive Vice President and CTO
Entered the Board in November 1997.

Member of the Boards of:
- BIRC-Estate A/S
- Dansk Industris Hovedbestyrelse (The General Council of the Confederation of Danish Industries)

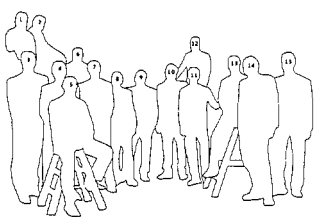
Jens Anders Jensen, (47 years)
Executive Vice President and CSO
Entered the Board in April 2001.

Chairman of the Board of:
- Danish Wind Industry Association

Knud Andersen, (49 years)
Executive Vice President and CPO
Entered the Board in March 2004.

Member of the Boards of:
- Dansk Industri Østjylland (The East Jutland Confederation of Danish Industries)
- Flonidan Gas Division A/S
- Scandinavian Brake Systems A/S

Management Group



1. Tom Carbone, President Vestas Americas A/S
2. Søren Husted, President Vestas Nacelles A/S
3. Mogens Filtenborg, Group Executive Vice President and CTO
4. Jens Anders Jensen, Group Executive Vice President and CSO
5. Svend Sigaard, President and CEO
6. Henrik Nørremark, Group Executive Vice President and CFO
7. Knud Andersen, Group Executive Vice President and CPO
8. Paolo Tabarelli de Fatis, President Vestas Mediterranean East A/S
9. Tom Krøjgaard Pedersen, President Vestas Northern Europe A/S
10. Ebbe Funk, President Vestas Mediterranean West A/S
11. Bjarne Raun Sørensen, President Vestas Control Systems A/S
12. Thorbjørn Rasmussen, President Vestas Asia Pacific A/S
13. Søren Halmø Kristensen, President Vestas Towers A/S
14. Ole Borup Jacobsen, President Vestas Blades A/S
15. Hans Jørn Rieks, President Vestas Central Europe A/S

NEG Micon A/S is included by 10 months in the consolidated annual report for 2004 due to the combination of Vestas and NEG Micon. It should thus be noted that the comparison to 2003 is significantly influenced hereby. A non-audited pro forma summary of the Group's full-year operations can be found under the year in outline.

Net turnover

From 2003 to 2004 the Group's net turnover has increased by mEUR 908 to mEUR 2,561 (approximately 55 per cent). The increase in turnover is realised both in the European market where the turnover has increased by mEUR 490 or approximately 41 per cent, and in other markets where the turnover has increased by mEUR 419 or approximately 94 per cent. Of the total turnover, mEUR 1,687 relates to the second half of 2004.

Gross profit

In the same period the gross profit decreased by mEUR 29 to mEUR 121 and the gross margin decreased from 9.1 per cent to 4.7 per cent.

Below a number of matters, which have influenced the gross profit in a negative direction compared to the expectations for the year, are outlined.

The gross profit and the gross margin have been influenced significantly by the operational disruptions which have arisen in connection with the merger the combination and the subsequent integration and restructuring. The large turnover in the second half of 2004 has thus been carried out by a newly composed organisation which has had a negative affect on the gross margin.

There have been significant excesses on projects, including Horns Reef, which have reduced the gross profit by mEUR 38. On the contrary, the main part of the realised synergies of mEUR 14 has improved the gross profit as the main part has been reached within purchase and production.

The production expenses have been relatively high. This is among other things due to periodical lack of coherence between production capacity and sales and subsequent larger change-over expenses. The Group's wish to honour commitments from before the combination has also meant that in 2004 a complete product programme has been maintained for both Vestas and NEG Micon. This has also contributed to the relatively high production expenses and has thus had a significant affect on the gross margin.

Development expenses before adjustment regarding capitalization and impairment losses and amortisation amount to mEUR 58 which is an increase of mEUR 21 compared to 2003. The development expenses have primarily been paid to partly the development of new types of wind turbines, including V100 and V120, and partly additional optimisation of V80. Finally, the expenses cover part of the development of eg. concepts for transport and tools for blades. The Group's expensed development expenses amount to mEUR 50 compared to mEUR 23 in 2003.

The distribution expenses have increased by mEUR 14 to mEUR 42 and the administrative expenses by mEUR 39 to mEUR 87. The distribution and administrative expenses now amount to 5.1 per cent of the net turnover compared to 4.6 per cent in 2003 which essentially is due to the fact, that the expenses include the integration and restructuring expenses.

Result before financial income and expenses (EBIT)

The result before financial income and expenses has decreased by mEUR 83 compared to 2003 and is negative by mEUR 9 and has decreased in relative terms from 4.5 per cent to a negative 0.4 per cent. The decrease is made up of a decrease of approximately mEUR 62 in Europe and a decrease of approximately mEUR 21 in the rest of the world.

The decrease is a result of the increase in turnover mentioned above less nonrecurring costs, relatively higher production expenses and higher capacity expenses which essentially are results of the combination and the subsequent operational disruptions.

Result before tax

After deduction of financial expenses by mEUR 41 the result before tax is negative by mEUR 50 compared to a positive result of mEUR 54 the previous year.

Fixed assets

Fixed assets amount to mEUR 930 compared to mEUR 385 the last year. The increase of mEUR 545 is divided on intangible assets by mEUR 390, property, plant and equipment by mEUR 148, and fixed asset investments by mEUR 7.

The increase in intangible assets is primarily a result of an increase in goodwill due to the acquisition of NEG Micon A/S, but also of an increase in the item finalized development projects and development projects in progress.

The Group's increase in turnover and production of still larger wind turbines means that there is a continually increasing need for conversion of production capacity from kilowatt wind turbines to megawatt wind turbines. This makes it necessary to make continuous investments in both buildings and production plant. And in addition hereto are investments in on-going improvements in efficiency.

However, the increase in property, plant and equipment can to a large extent be ascribed to the acquisition of NEG Micon A/S as the net addition in connection with the acquisition amounts to mEUR 150. Furthermore, investments (net) in 2004 in property, plant and equipment have amounted to mEUR 80 compared to mEUR 82 last year. A total of net mEUR 22 was used for other fixture and fittings, tools and equipment compared to also mEUR 22 in 2003, and mEUR 21 was used for land and buildings which is mEUR 5 more than in 2003. The net investment in plant and machinery amounts to mEUR 28 compared to mEUR 31 last year.

Inventories

Inventories at year-end amount to mEUR 436 compared to mEUR 193 by the end of 2003, or an increase of mEUR 243 of which mEUR 172 relates to raw materials and consumables.

Receivables

Receivables have increased by mEUR 573 and amount to mEUR 1,365 at year-end.

The sales value of orders in progress amounts to mEUR 585 compared to mEUR 338 by the end of 2003 or an increase of mEUR 247.

From 2003 to 2004 trade receivables have increased by mEUR 167 to mEUR 508. A significant part of the receivables from debtors are secured through bank guarantees, banker's credit, credit insurance, retention of title, or the like.

Finally, other receivables amount to mEUR 158 compared to mEUR 81 last year.

Warranty provisions

The provisions for the year amount to mEUR 106 compared to mEUR 69 last year. Warranty provisions include a expected refund from suppliers. The expected refund from suppliers is included under other receivables.

The consumption during the year of the warranty provisions amounts to mEUR 121 which is approximately mEUR 67 more than last year.

Cash flow

The year's cash flow from operations is negative by mEUR 30 compared to a positive amount of EUR 153 last year.

At 31 December 2004 the NetWorkingCapital (NWC) amounts to mEUR 853 compared to mEUR 603 at the end of 2003. Measured in relation to the year's net turnover, the NWC totals 33.3 per cent compared to 36.5 per cent last year, or a relative decrease of 3.2 per cent point. The increase in working capital of mEUR 250 consist of an increase in inventories of mEUR 243, and increase in receiveables of mEUR 508, and increases in prepayments from customers, trade payables, and other payables of mEUR 501.

Cash flows from investing activities are negative by mEUR 529 compared to a negative mEUR 199 in 2003. The most significant difference is a result of the acquisition of a business with mEUR 398.

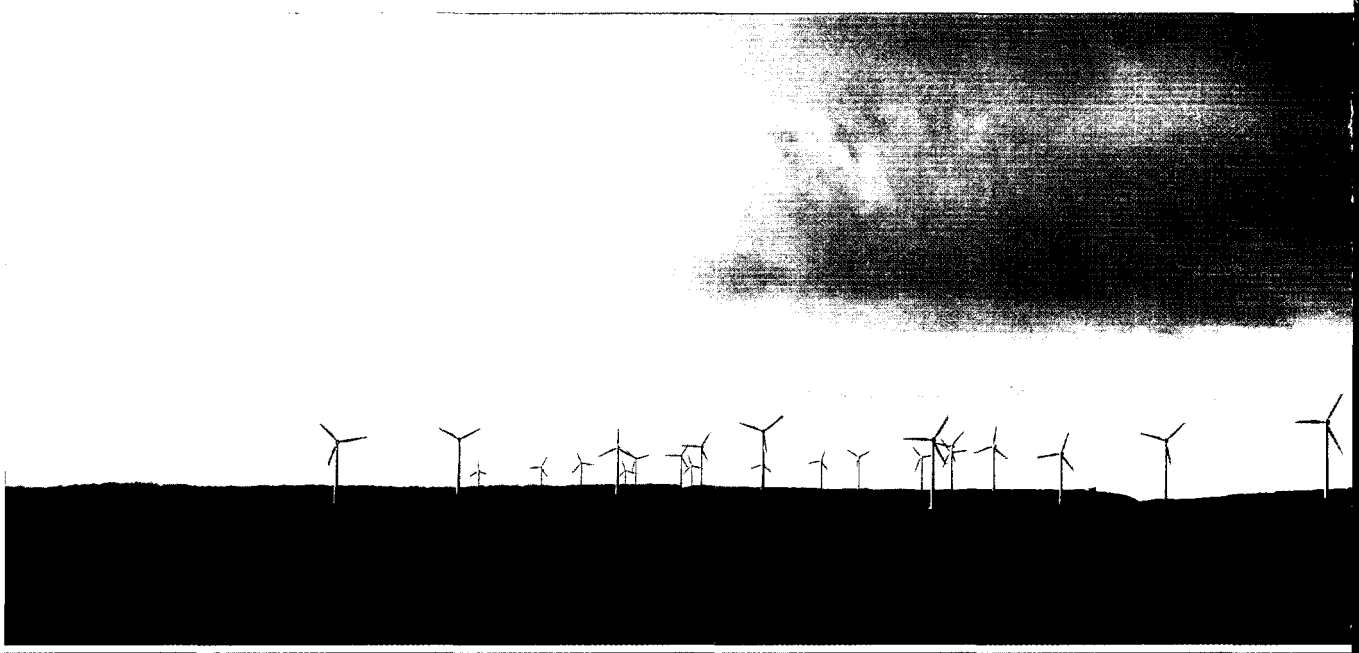
Cash flows from financing activities are positive, among other things as a result of an increase of capital of EUR 671 in 2004, and amount to mEUR 845.

Development in balance sheet and equity

At 31 December 2004 the Group's total balance sheet total amounts to mEUR 2,924 compared to mEUR 1,390 at 31 December 2003 or an increase of mEUR 1,534. The equity has increased by mEUR 638 and amounts to mEUR 1,251 at 31 December 2004.

The increase in equity is most importantly a result of the increase of capital carried out in 2004 in connection with the acquisition of business and issue of shares.

Despite the relatively significant development in the balance sheet total the solvency ratio has only decreased from 44.1 per cent to 42.8 per cent and is thus still above the target of 35 per cent for the Vestas Group.



37 V66-1.75 MW wind turbines installed at the Woolnorth site on Tasmania, Australia

Basis of preparation

The Annual Report has been prepared in accordance with the provisions of the Danish Financial Statements Act applying to enterprises of reporting class D, current Danish accounting standards as well as the requirements laid down by the Copenhagen Stock Exchange in respect of the financial reporting of companies listed on the stock exchange.

The accounting policies applied are unchanged from those applied in 2003.

Vestas is an international enterprise and consequently the Annual Report is used for many purposes. Therefore, the Annual Report is submitted in EUR. The income statement is translated at average exchange rates, and balance sheet items are translated at the exchange rates at the balance sheet date. Exchange adjustments arising on the translation of the opening equity at the exchange rates at the balance sheet date, and on the translation of the income statement from average exchange rates to the exchange rates at the balance sheet date, are recognised directly in equity.

Recognition and measurement

The Annual Report has been prepared based on the historical cost principle. Subsequently, assets and liabilities are measured as described for each item below.

Assets are recognised in the balance sheet when it is probable that future economic benefits attributable to the asset will flow to the Group, and the value of the asset can be measured reliably.

Liabilities are recognised in the balance sheet when it is probable that future economic benefits will flow out of the Group, and the value of the liability can be measured reliably.

Recognition and measurement take into account gains, losses and risks occurring before the presentation of the Annual Report which confirm or invalidate affairs and conditions existing at the balance sheet date.

Basis of consolidation

The Annual Report comprises the Parent Company, Vestas Wind Systems A/S, and subsidiaries in which the Parent Company directly or indirectly holds more than 50 per cent of the votes or in which the Parent Company, through share ownership or otherwise, exercises control. Enterprises in which the Group holds between 20 per cent and 50 per cent of the votes and exercises significant influence but not control are classified as associates, cf. the Group Chart.

The annual reports used for the purpose of the Annual Report of the Group have been prepared in accordance with the accounting policies of the Group. The Annual Report of the Group has been prepared on the basis of the Annual Reports of the Parent Company and subsidiaries by combining accounting items of a uniform nature.

On consolidation, elimination is made of intercompany income and expenses, shareholdings, intercompany accounts and dividends as well as of realised and unrealised gains and losses on transactions between the consolidated enterprises.

Companies or projects that have been established as joint ventures with joint management are consolidated pro rata.

New acquired, sold or woundup enterprises are recognised in the consolidated income statement from the time of acquisition/until the time of sale. Comparative figures are not adjusted for newly acquired, sold or woundup enterprises.

On acquisition of subsidiaries, the difference between cost of acquisition and net asset value of the enterprise acquired is determined at the date of acquisition after the individual assets and liabilities having been adjusted to fair value (the purchase method) and allowing for the recognition of any restructuring provisions relating to the enterprise acquired. Any remaining positive differences (goodwill) are recognised in intangible assets in the balance sheet as goodwill, which is amortised in the income statement on a straightline basis over its estimated useful life, but not exceeding 20 years.

Goodwill from enterprises may, due to changes to the recognition and measurement of net assets, be adjusted for a period of up to one year following the time of acquisition.

Amortisation of goodwill is allocated in the Consolidated Financial Statements to the operations to which goodwill relates.

Minority interests

On statement of group results and group equity, the shares of results and equity of subsidiaries attributable to minority interests are recognised as separate items in the income statement and the balance sheet. Minority interests are recognised on the basis of a remeasurement of acquired assets and liabilities to fair value at the time of acquisition of subsidiaries.

On subsequent changes to minority interests, the changed share of the profit is included from the time of the change.

Investments in subsidiaries and associates

Investments in subsidiaries and associates are recognised and measured in the Annual Report of the Parent Company under the equity method.

The items "Income from investments in subsidiaries before tax" and "Income from investments in associates before tax" in the income statement include the proportionate share of the profit before tax less goodwill amortisation, whereas the share of tax of subsidiaries and associates is included in the item "Corporation tax".

The items "Investments in subsidiaries" and "Investments in associates" in the balance sheet include the proportionate

ownership share of the net asset value of the enterprises calculated under the accounting policies of the Parent Company with deduction or addition of unrealised intercompany profits or losses and with addition of any remaining value of positive differences (goodwill).

Subsidiaries and associates with a negative net asset value are measured at EUR 0, and any receivables from these are written down by the Parent Company's share of the negative net asset value. Any legal or constructive obligation of the Parent Company to cover the negative balance of the company is recognised in provisions.

The total net revaluation of investments in subsidiaries and associates is transferred upon distribution of profit to "Reserve for net revaluation under the equity method" under equity.

Positive differences in connection with acquisition of investments in subsidiaries and associates are calculated and treated according to the same methods as mentioned under basis of consolidation, except that any differences in the balance sheet of the Parent Company are included under the item "Investments in subsidiaries".

Gains or losses on disposal or liquidation of subsidiaries are calculated as the difference between the sales sum or the liquidation amount and the carrying amount of net assets at the time of sale or liquidation, including unamortised goodwill and expected sales or liquidation expenses. Gains or losses are recognised in the income statement.

Translation policies

On initial recognition, transactions in foreign currencies are translated at the exchange rates at the dates of transaction. Exchange differences arising between the transaction date rates and the rates at the dates of payment are recognised in financial income and expenses in the income statement.

Receivables, payables and other monetary items in foreign currencies that have not been settled at the balance sheet date are translated at the exchange rates at the balance sheet date. Any differences between the exchange rates at the balance sheet date and the transaction date rates are recognised in financial income and expenses in the income statement.

On recognition of foreign subsidiaries and associates that are separate legal entities, the income statements are translated at the average exchange rates of the month, and balance sheet items are translated at the exchange rates at the balance sheet date. Exchange adjustments arising on the translation of the opening equity of foreign subsidiaries at the exchange rates at the balance sheet date and on the restatement of income statements from average exchange rates to exchange rates at the balance sheet date, are recognised directly in equity.

Derivative financial instruments

Derivative financial instruments are initially recognised in the balance sheet at cost and are subsequently measured at their fair values. Positive and negative fair values of derivative financial instruments are included as prepayments and deferred income, respectively.

Changes in the fair values of derivative financial instruments that qualify as fair value hedges of a recognised asset or a recognised liability are recognised in the income statement as are any changes in the value of the hedged asset or the hedged liability.

Changes in the fair values of derivative financial instruments that qualify as hedges of expected future transactions relating to purchases and sales in foreign currencies or interest rate hedging are recognised in prepayments or deferred income and retained earnings under equity. If the expected future transaction results in the recognition of assets or liabilities, amounts deferred in equity are transferred from equity and recognised in the cost of the asset or the liability respectively. Amounts deferred in equity are transferred to the income statement in the period in which the hedged item affects the income statement.

As regards derivative financial instruments that do not qualify as hedging instruments, changes in fair value are recognised in the income statement on a current basis.

Changes in the fair value of derivative financial instruments that are used for the hedging of net investments in separate foreign subsidiaries or associates are recognised directly in equity.

Leases

Leases in respect of property, plant and equipment in terms of which the individual Group companies assume substantially all the risks and rewards of ownership (finance leases) are recognised in the balance sheet at the fair value of the leased asset, if measurable. Alternatively, the net present value, if lower, of future lease payments at the inception of the lease is applied. When computing the net present value, the interest rate implicit in the lease is applied as the discount rate or an approximated value. Assets acquired under finance leases are depreciated and written down for impairment like the other property, plant and equipment of the Group.

The remaining lease obligation is capitalised and recognised in the balance sheet under debt, and the interest element on the lease payments is charged over the lease term to the income statement.

All other leases are considered operating leases. Payments made under operating leases are recognised in the income statement over the lease term.

Corporation tax and deferred tax

The Group is partly jointly taxed, involving joint and several liability for the tax payments of the jointly taxed enterprises. The net tax on the jointly taxed income is expensed in the Parent Company.

Tax for the year consists of current tax for the year and deferred tax for the year. The tax attributable to the profit for the year is recognised in the income statement, whereas the tax attributable to equity entries is recognised directly in equity. Any share of the tax reported in the income statement arising from profit/loss on extraordinary activities for the year is attributed to such activities, whereas the remaining share is attributed to profit/loss on ordinary activities for the year.

Current tax liabilities and current tax receivable are recognised in receivables in the balance sheet in the event of overpayment of tax on account, and in debt in the event of underpayment of tax on account.

Deferred tax is measured under the balance sheet liability method in respect of all temporary differences between the carrying amount and the tax base of assets and liabilities. However, deferred tax is not recognised in respect of temporary differences concerning goodwill not deductible for tax purposes or other items – apart from business acquisitions – where temporary differences have arisen at the time of acquisition without affecting the profit for the year or the taxable income.

Deferred tax assets, including the tax base of tax loss carryforwards, are recognised at the value at which the asset is expected to be realised, either by elimination in tax on future earnings or by setoff against deferred tax liabilities within the same legal tax entity and jurisdiction.

Adjustment is made for deferred tax concerning unrealised intercompany gains and losses.

Deferred tax is measured on the basis of the tax rules and tax rates of the respective countries that will be effective under the legislation at the balance sheet date when the deferred tax is expected to crystallise as current tax. Any changes in deferred tax due to changes to tax rates are recognised in the income statement.

Segment reporting

Segment information is presented in respect of geographical segments based on the Group's risks and returns and its internal financial reporting system.

Items included in net profit for the year, including shares of profits in associates and financial income and expenses, are allocated to the extent that the items can be directly or indirectly referred to the segments. Items allocated through both direct and indirect calculation comprise "production costs", "distribution expenses" and "administrative expenses". Allocation of items through indirect calculation is based on distribution keys established on the basis of the segment's use of key resources.

Segment assets comprise all assets used directly for segment operations, including intangible assets, property, plant and equipment and investments in associates as well as current assets.

Segment liabilities comprise segment operating liabilities, including trade payables and other debt.

Incentive schemes

The Group offers a warrant programme to the Board of Directors, the Board of Management and a number of senior executives. The warrant programme is considered an equity instrument and is therefore not recognised in the income statement and the balance sheet. The key terms of the programme are disclosed in the notes, including the value calculated according to the Black-Scholes model.

Government grants

Government grants comprise subsidies for investments, research and development projects, etc. Subsidies for research and development projects are recognised in the income statement or the balance sheet under development costs, so that they set off the expenses for which they compensate.

Capitalised subsidies for investments and development projects are set off against the cost of the assets in respect of which the subsidy is granted.

Income statement

Net turnover

Net turnover equals the sales value of the work completed for the year according to the percentage-of-completion method. Net turnover comprises sold and delivered wind power plants, etc with addition of change in the sales value of orders in progress, which is measured at assessed sales value considering the assessed stage of completion of the orders.

Production costs

Production costs comprise the expenses incurred to achieve net turnover for the year. Cost includes raw materials, consumables, direct wages and indirect expenses, such as salaries, rental and lease expenses as well as depreciation and amortisation of production plant and goodwill.

Production costs also include research expenses, development costs that do not qualify for capitalisation and amortisation of capitalised development costs.

Distribution expenses

Distribution expenses include expenses incurred for the distribution of goods sold during the year as well as sales campaigns, etc carried through during the year. Furthermore, expenses for sales employees, advertising and exhibition expenses and depreciation are included.

Administrative expenses

Administrative expenses include expenses incurred for the year for the management and administration of the Group, including expenses for administrative employees, Management, office premises, office expenses and depreciation.

Depreciation and amortisation

Depreciation and amortisation based on cost reduced by any scrap value are calculated on a straightline basis over the expected useful lives of the assets, which are:

Goodwill	5-20 years
Patents	5-10 years
Development costs	3-5 years
Software	5 years
Buildings, including installations	25-40 years
Leasehold improvements	5-10 years
Plant and machinery	3-10 years
Machine tools produced inhouse and newly produced test and exhibition turbines	3-5 years
Other fixtures, fittings, tools and equipment	3-5 years
Operating wind turbines in subsidiary and associated undertakings	10-20 years

Amortisation and depreciation comprise gains and losses from current replacement of property, plant and equipment. New acquisitions costing less than kEUR 4 are expensed in full in the year of acquisition.

Amortisation and depreciation are recognised in the income statement under production costs, distribution expenses and administrative expenses, respectively.

Financial income and expenses

Financial income and expenses comprise interest income and expenses, exchange gains and losses on securities, debt and transactions in foreign currencies, amortisation of financial assets and liabilities as well as extra payments and repayment under the on-account taxation scheme, etc. Financial income and expenses are recognised at the amounts which relate to the financial year.

Balance sheet

Intangible assets

Goodwill

Goodwill is amortised over the estimated useful life determined on the basis of Management's experience with the individual business areas. Goodwill is amortised on a straightline basis over the amortisation period, which is usually 5 years, however maximum 20 years, the longest period applying to enterprises acquired for strategic purposes with a longterm earnings profile.

Software

Software is amortised over the estimated useful life determined on the basis of Management's experience with the individual business areas. Software is amortised on a straightline basis over the amortisation period, which is usually 5 years.

Development projects

Development costs comprise expenses, salaries and amortisation directly or indirectly attributable to the Company's development activities.

Development projects that are clearly defined and identifiable and in respect of which technical feasibility, sufficient resources and a potential future market or development opportunity in the enterprise can be demonstrated, and where it is the intention to manufacture, market or use the project, are recognised as intangible assets. This applies if the cost can be calculated reliably and if sufficient certainty exist that future earnings can cover the production costs, sales and administrative expenses involved as well as the development costs.

Development costs that do not meet the criteria for recognition in the balance sheet are recognised as expenses in the income statement as incurred.

Capitalised development costs are measured at cost less accumulated amortisation or at a lower recoverable amount.

On completion of development work, development costs are amortised on a straightline basis over the estimated useful life. The amortisation period is 3-5 years.

Property, plant and equipment

Property, plant and equipment are measured at cost, and as regards buildings, an addition is made of revaluation from previous years, less accumulated depreciation and impairment losses. Land is measured at cost and is not depreciated.

Cost comprises the cost of acquisition and expenses directly related to the acquisition/production as well as setup expenses. In the case of production equipment of own construction, cost also comprises indirect expenses for materials, components, subsuppliers and labour.

Gains and losses on disposal of property, plant and equipment are calculated as the difference between the selling price less sales expenses and the carrying amount at the time of the sale. Gains or losses are recognised in the income statement under depreciation.

Impairment of fixed assets

The carrying amounts of both intangible assets and property, plant and equipment are reviewed on an annual basis to determine whether there is any indication of impairment other than that expressed by amortisation and depreciation. If so, the asset is written down to its lower recoverable amount. The recoverable amount of the asset is calculated as the higher of net sales value and value in use. Where a recoverable amount cannot be determined for the individual asset, the assets are assessed in the smallest group of assets for which a reliable recoverable amount can be determined based on a total assessment.

Goodwill, software, development costs and other assets for which a value in use cannot be determined, as the asset does not on an individual basis generate future cash flows, are reviewed for impairment together with the group of assets to which they are attributable.

Long-term receivables

Other receivables under fixed asset investments comprise individual receivables arisen in connection with the sale of wind power plants. Receivables are measured at fair value.

Other securities, deposits, etc.

Holdings of shares in other enterprises as well as deposits are measured at fair value.

Inventories

Inventories are measured at cost according to the weighted average method. Obsolete goods, including slowmoving items, are written down to the lower of cost and net realisation price.

The cost of goods for resale, raw materials and consumables equals landed cost.

The cost of finished goods and work in progress comprises the cost of raw materials, consumables, direct labour and indirect production costs. Indirect production costs comprise the cost of indirect materials and labour as well as maintenance and depreciation of the machinery, factory buildings and equipment used in the manufacturing process as well as costs of factory administration and management.

Receivables

Receivables are recognised in the balance sheet at the lower of amortised cost and net realisable value, corresponding to nominal value less provision for bad debts determined on the basis of an individual assessment of each receivable.

Sales value of orders in progress

The sales value of orders in progress is measured at the sales value of the work performed based on the stage of completion. The stage of completion is measured by the proportion that the contract expenses incurred to date bear to the estimated contract expenses. Where it is probable that total contract expenses will exceed total revenues from a contract, the expected loss is recognised as an expense in the income statement.

Prepayments are set off against sales value of orders in progress. Payments received on account in excess of the contract work performed to date are stated separately for each contract and recognised as prepayments received from customers in shortterm debt.

Expenses relating to sales work and the winning of contracts are recognised in the income statement as incurred.

Prepayments and deferred income

Prepayments include expenses incurred in respect of subsequent financial years, including fair value adjustments of derivative financial instruments with a positive fair value.

Deferred income includes payments received in respect of income in subsequent years as well as fair value adjustments of derivative financial instruments with a negative fair value.

Equity and dividend

Proposed dividend is recognised as a liability at the time of adoption at the Annual General Meeting. Dividend expected to be distributed for the year is disclosed as a separate equity item.

Provision for pension obligations

If pension obligations relating to defined benefit plans are not covered by insurance, a provision is made in this respect.

Warranty provisions

Warranty provisions, which are recognised systematically, comprise assessed warranty and service obligations in respect of delivered wind power plants on the basis of experience. At the commencement of the warranty period, a calculated provision is made per type of wind turbine. Subsequently regular measurement is made based on an overall assessment of the need for provisions.

Other provisions

Other provisions are recognised when, in consequence of a previous event, the Company has a legal or constructive obligation and it is probable that settlement of the obligation will result in consumption of the Company's financial resources.

Financial debts

Mortgage loans and loans from credit institutions are recognised initially at the proceeds received net of transaction expenses incurred. Subsequently, the financial debts are recognised at amortised cost equal to the capitalised value using the effective interest method, the difference between the proceeds and the nominal value being recognised in the income statement over the loan period.

Financial debts also include the capitalised remaining lease obligation on finance leases.

Other debts, which comprise trade payables and payables to Group enterprises and associates as well as other payables, are measured at amortised cost, substantially corresponding to nominal value.

Other payables

Other payables comprise accrued value added tax, wage, salary and holiday pay obligations, withheld personal taxes for employees, etc.

Cash flow statement

The cash flow statement shows the Group's cash flows for the year broken down by operating activities, investing activities and financing activities for the year, changes for the year in cash and cash equivalents as well as the Group's cash and cash equivalents at the beginning and end of the year. The figures of the cash flow statement cannot be immediately derived from the Annual Report.

Cash flows from operating activities

Cash flows from operating activities are calculated as the net profit/loss for the year adjusted for noncash operating items such as depreciation, amortisation and impairment losses, provisions as well as changes in working capital, interest received and paid and corporation tax paid. Working capital comprises current assets less shortterm debt, which does not include shortterm bank loans.

Cash flows from investing activities

Cash flows from investing activities comprise cash flows from acquisitions and disposals of companies at the time of acquisition or sale as well as acquisitions and disposals of intangible assets, property, plant and equipment and fixed asset investments.

Cash flows from financing activities

Cash flows from financing activities comprise changes in the Group's share capital and related expenses as well as the raising of loans, repayment of interestbearing debt and payment of dividend to shareholders.

Conversion to International Financial Reporting Standards

From and including 2005, Vestas must prepare consolidated financial statements in accordance with International Financial Reporting Standards (IFRS).

An assessment of the implications of the conversion to IFRS has been initiated. The implications of the conversion to IFRS may be material, for example in relation to recognition and measurement as well as presentation and disclosure. The work of assessing the implications has not been finally concluded. Therefore, in connection with the publication of the announcement of financial results for the first six months of 2005, Vestas expects to present information on the effect of the new accounting policies on results, financial position, etc.

Consequently, all Vestas' expectations to the future are based on the Group's present accounting policies.


Dcd930

Income statement 1 January - 31 December

Parent Company				Group	
2003 mEUR	2004 mEUR			2004 mEUR	2003 mEUR
1,121.1	**38.9**	1, 21	**Net turnover**	**2,561.2**	**1,652.5**
1,062.1	159.8	2	Production costs	2,440.7	1,502.1
59.0	**(120.9)**		**Gross profit**	**120.5**	**150.4**
9.0	4.7	2	Distribution expenses	42.1	27.8
28.3	33.5	2, 3	Administrative expenses	87.5	48.4
37.3	**38.2**		**Capacity costs**	**129.6**	**76.2**
21.7	**(159.1)**	**21**	**Result before financial income and expenses**	**(9.1)**	**74.2**
41.3	105.2	4	Income from investments in Group companies before tax	0.0	0.0
0.0	0.0	5	Income from investments in associates before tax	(0.1)	0.0
12.4	35.2	6	Financial income	10.4	2.7
21.5	32.8	7	Financial expenses	50.9	24.2
32.2	**107.6**		**Net financial items**	**(40.6)**	**(21.5)**
53.9	**51.5**		**Result after financial income and expenses**	**(49.7)**	**52.7**
0.0	0.0		Received on receivable from Vestas RRB India Ltd. written down	0.0	1.2
53.9	**51.5**		**Result before tax**	**(49.7)**	**53.9**
18.3	(12.3)	8	Corporation tax	(11.8)	18.3
35.6	**(39.2)**		**Result before minority interests**	**(37.9)**	**35.6**
0.0	0.0		Minority interests	(1.3)	0.0
35.6	**(39.2)**		**Net result for the year**	**(39.2)**	**35.6**
			Proposed distribution of profit		
(9.1)	80.1		Reserve for net revaluation under the equity method		
44.7	(119.3)		Retained earnings		
35.6	**(39.2)**		**Net result for the year**		

Assets

Parent Company 2003 mEUR	Parent Company 2004 mEUR			Group 2004 mEUR	Group 2003 mEUR
33.2	38.1		Completed development projects	54.6	34.3
0.0	18.4		Goodwill	308.4	10.7
0.0	0.0		Software	0.9	0.0
14.1	85.4		Development projects in progress	85.4	14.1
47.3	**141.9**	**9**	**Intangible assets**	**449.3**	**59.1**
115.4	125.0		Land and buildings	215.0	135.3
82.2	10.6		Plant and machinery	155.0	130.0
21.4	11.9		Other fixtures and fittings, tools and equipment	88.3	37.7
17.6	5.4		Property, plant and equipment in progress	10.6	18.2
236.6	**152.9**	**10**	**Property, plant and equipment**	**468.9**	**321.2**
162.5	1,159.2		Investments in Group companies	0.0	0.0
5.3	0.0		Receivables from Group companies	0.0	0.0
0.5	0.5		Investments in associates	2.8	0.5
0.0	0.0		Receivables from associates	0.6	0.0
0.0	0.0		Other receivables	4.5	1.3
2.8	2.4		Other investments, deposits, etc.	4.0	3.0
171.1	**1,162.1**	**11**	**Fixed asset investments**	**11.9**	**4.8**
455.0	**1,456.9**		**Fixed assets**	**930.1**	**385.1**
122.9	**1.0**	**12**	**Inventories**	**436.0**	**193.1**
6.0	2.3		Trade receivables	507.9	341.1
261.6	0.0	13	Sales value of orders in progress	585.3	337.5
276.3	406.7		Receivables from Group companies	0.0	0.0
0.1	0.0		Receivables from associates	0.0	7.3
60.1	70.8		Other receivables	157.5	80.6
4.1	1.0		Corporation tax	13.3	8.4
0.0	0.0	15	Deferred tax asset	75.1	14.9
1.6	14.1		Prepayments	25.6	1.8
609.8	**494.9**	**14**	**Receivables**	**1,364.7**	**791.6**
1.1	**108.3**	**30**	**Cash at bank and in hand**	**192.7**	**20.4**
733.8	**604.2**		**Current assets**	**1,993.4**	**1,005.1**
1,188.8	**2,061.1**		**Total assets**	**2,923.5**	**1,390.2**

Liabilities and equity

Parent Company				Group	
2003 mEUR	2004 mEUR			2004 mEUR	2003 mEUR
14.1	23.5		Share capital	23.5	14.1
40.4	0.0		Share premium account	0.0	40.4
96.1	176.2		Reserve for net revaluation under the equity method	0.0	0.0
462.7	1,051.0		Retained earnings	1,227.2	558.8
0.0	0.0		Proposed dividend for the year	0.0	0.0
613.3	**1,250.7**		**Equity**	**1,250.7**	**613.3**
41.1	3.2	15	Provision for deferred tax	25.8	50.1
42.8	0.0	16	Warranty provisions	167.0	97.4
16.8	19.7	17	Other provisions	19.7	16.8
0.0	0.0	18	Pension obligations	1.2	1.2
100.7	**22.9**		**Provisions**	**213.7**	**165.5**
52.1	89.5		Mortgage debt	92.9	55.6
48.9	353.3		Credit institutions	379.5	50.0
101.0	**442.8**	**19**	**Long-term debt**	**472.4**	**105.6**
7.3	22.9	19	Short-term share of long-term debt	31.2	9.0
4.3	0.0		Prepayments from customers	226.4	48.8
127.9	0.0		Bank loans	78.7	133.3
123.4	18.1		Trade payables	403.6	212.4
79.2	283.0		Payables to Group companies	0.0	0.0
0.0	0.0		Corporation tax	17.4	5.2
31.7	20.7		Other payables	229.4	97.1
373.8	**344.7**		**Short-term debt**	**986.7**	**505.8**
474.8	**787.5**		**Debt**	**1,459.1**	**611.4**
1,188.8	**2,061.1**		**Liabilities and equity**	**2,923.5**	**1,390.2**
		20	Employees		
		21	Segment information		
		22	Related parties		
		23	Mortgages and security		
		24	Contractual obligations		
		25	Contingent liabilities		
		26	Financial instruments, interest rate risks and credit risks		

Group

	Share capital	Share premium account	Reserve under the equity method	Retained earnings	Proposed dividend	Total
	mEUR	mEUR	mEUR	mEUR	mEUR	mEUR
Equity at 1 January 2004	**14.1**	**40.4**	**0.0**	**558.8**	**0.0**	**613.3**
Exchange rate adjustment from conversion to EUR	0.0	0.0	0.0	0.5	0.0	0.5
Capital increase, purchase of subsidiary	3.5	384.1	0.0	0.0	0.0	387.6
Capital increase, cash	5.9	277.3	0.0	0.0	0.0	283.2
Exchange adjustments relating to separate foreign legal entities	0.0	0.0	0.0	(2.0)	0.0	(2.0)
Fair value adjustments recognised in equity	0.0	0.0	0.0	7.3	0.0	7.3
Net profit for the year	0.0	0.0	0.0	(39.2)	0.0	(39.2)
Transfer*	0.0	(701.8)	0.0	701.8	0.0	0.0
Equity at 31 December 2004	**23.5**	**0.0**	**0.0**	**1,227.2**	**0.0**	**1,250.7**
Equity at 1 January 2003	**14.1**	**40.5**	**0.0**	**530.9**	**10.6**	**596.1**
Exchange rate adjustment from conversion to EUR	0.0	(0.1)	0.0	(1.5)	0.0	(1.6)
Dividend paid to shareholders	0.0	0.0	0.0	0.0	(10.6)	(10.6)
Exchange adjustments relating to separate foreign legal entities	0.0	0.0	0.0	(3.1)	0.0	(3.1)
Fair value adjustments recognised in equity	0.0	0.0	0.0	(3.1)	0.0	(3.1)
Net profit for the year	0.0	0.0	0.0	35.6	0.0	35.6
Equity at 31 December 2003	**14.1**	**40.4**	**0.0**	**558.8**	**0.0**	**613.3**

** According to changed legislation, the Share premium account is transferred to Retained earnings at 31 December 2004.*

Parent Company

	Share capital	Share premium account	Reserve under the equity method	Retained earnings	Proposed dividend	Total
	mEUR	mEUR	mEUR	mEUR	mEUR	mEUR
Equity at 1 January 2004	**14.1**	**40.4**	**96.1**	**462.7**	**0.0**	**613.3**
Exchange rate adjustment from conversion to EUR	0.0	0.0	0.0	0.5	0.0	0.5
Capital increase, purchase of subsidiary	3.5	384.1	0.0	0.0	0.0	387.6
Capital increase, cash	5.9	277.3	0.0	0.0	0.0	283.2
Exchange adjustments relating to separate foreign legal entities	0.0	0.0	0.0	(2.0)	0.0	(2.0)
Fair value adjustments recognised in equity	0.0	0.0	0.0	7.3	0.0	7.3
Net profit for the year	0.0	0.0	80.1	(119.3)	0.0	(39.2)
Transfer*	0.0	(701.8)	0.0	701.8	0.0	0.0
Equity at 31 December 2004	**23.5**	**0.0**	**176.2**	**1,051.0**	**0.0**	**1,250.7**
Equity at 1 January 2003	**14.1**	**40.5**	**105.5**	**425.4**	**10.6**	**596.1**
Exchange rate adjustment from conversion to EUR	0.0	(0.1)	(0.3)	(1.2)	0.0	(1.6)
Dividend paid to shareholders	0.0	0.0	0.0	0.0	(10.6)	(10.6)
Exchange adjustments relating to separate foreign legal entities	0.0	0.0	0.0	(3.1)	0.0	(3.1)
Fair value adjustments recognised in equity	0.0	0.0	0.0	(3.1)	0.0	(3.1)
Net profit for the year	0.0	0.0	(9.1)	44.7	0.0	35.6
Equity at 31 December 2003	**14.1**	**40.4**	**96.1**	**462.7**	**0.0**	**613.3**

** According to changed legislation, the Share premium account is transferred to Retained earnings at 31 December 2004.*

Share capital	2004	2003	2002	2001	2000
	Pcs.	Pcs.	Pcs.	Pcs.	Pcs.
Number of shares at 1 January	105,003,966	105,003,966	104,780,861	104,780,861	10,456,057
Share split from DKK 10 to DKK 1					94,104,513
Capital increase, purchase of subsidiary	26,179,414				
Capital increase, cash	43,727,793				
Employee shares			223,105		220,291
Number of shares at 31 December	**174,911,173**	**105,003,966**	**105,003,966**	**104,780,861**	**104,780,861**

In March 2004, the Company issued 26,179,414 new shares at the takeover of NEG Micon A/S and subsequently in May 2004, 43,727,793 new shares at directed issue. The total expenses for the share increases amounted to mEUR 26.9 and comprise fees to banks, lawyers and auditors etc. The expenses are set off against the share premium account.

		2004 mEUR	2003 mEUR
	Net result for the year	(39.2)	35.6
27	Cash flow statement - adjustments	150.1	136.3
	Cash flows from operating activities before change in working capital	**110.9**	**171.9**
28	Cash flow statement – change in working capital	(89.9)	11.2
	Cash flows from operating activities before financial income and expenses	**21.0**	**183.1**
	Interest income, etc.	10,4	2.7
	Interest expenses	(50.9)	(24.1)
	Cash flows from ordinary activities	**(19.5)**	**161.7**
	Corporation tax paid	(10.3)	(8.6)
	Cash flows from operating activities	**(29.8)**	**153.1**
	Purchase of intangible assets	(38.7)	(27.8)
	Purchase of property, plant and equipment	(88.6)	(85.0)
	Other fixed asset investments made	(1.2)	(1.3)
29	Acquisition of company	(410.8)	(12.7)
	Sale of property, plant and equipment	9.0	1.7
	Sale of fixed asset investments	1.7	6.6
	Cash flows from investing activities	**(528.6)**	**(118.5)**
	Capital infusion, net	670.8	0.0
	Repayment of long-term debt	(152.0)	(14.4)
	Raising of long-term debt	326.2	5.4
	Dividend paid	0.0	(10.6)
	Cash flows from financing activities	**845.0**	**(19.6)**
	Change in cash and cash equivalents and short-term bank loans	**286.6**	**15.0**
	Cash and cash equivalents and short-term bank loans at 1 January	(112.9)	(122.8)
	Addition, acquisition of company	(59.7)	(5.1)
30	**Cash and cash equivalents and short-term bank loans at 31 December**	**114.0**	**(112.9)**

Parent Company				Group	
2003 mEUR	2004 mEUR			2004 mEUR	2003 mEUR
		1	**Net turnover**		
			Nordic countries	55.6	72.8
			Other European countries	1,639.6	1,132.5
			Rest of the world	866.0	447.2
1,121.1	**38.9**			**2,561.2**	**1,652.5**
		2	**Depreciation, amortisation and write-downs**		
			Depreciation, amortisation and write-downs of fixed assets with addition of expensed new acquisitions and profit/loss on sale amount to:		
0.0	0.8		Goodwill	17.2	1.5
0.0	0.0		Software	1.5	0.0
13.6	15.3		Development projects	30.5	13.7
5.2	5.0		Buildings	9.1	5.8
25.7	3.9		Plant and machinery	37.3	35.9
7.8	4.9		Other fixtures and fittings, tools and equipment	32.3	10.8
0.4	(0.3)		Loss/(profit) on sale	(0.9)	0.4
5.5	2.2		Other new acquisitions	18.1	6.9
58.2	**31.8**			**145.1**	**75.0**
			and have been expensed as follows:		
54.9	26.7		Production costs	123.3	69.8
1.1	0.0		Distribution expenses	5.9	1.3
2.2	5.1		Administrative expenses	15.9	3.9
58.2	**31.8**			**145.1**	**75.0**
		3	**Fees to auditors appointed by the General Meeting**		
			Audit:		
0.3	0.4		PricewaterhouseCoopers	1.2	0.7
0.0	0.1		KPMG C. Jespersen	0.8	0.0
0.1	0.0		Ernst & Young	0.0	0.3
0.4	**0.5**			**2.0**	**1.0**
			Non-audit services:		
0.8	1.7		PricewaterhouseCoopers	1.9	1.0
0.0	0.8		KPMG C. Jespersen	1.0	0.0
0.1	0.0		Ernst & Young	0.0	0.3
0.9	**2.5**			**2.9**	**1.3**
1.3	**3.0**		**Total fees to auditors appointed by the General Meeting**	**4.9**	**2.3**

Parent Company			Group	
2003 mEUR	2004 mEUR		2004 mEUR	2003 mEUR
		4 Income from investments in Group companies before tax		
42.8	127.8	Share of profits of Group companies before tax	0.0	0.0
(0.1)	(10.7)	Change in intercompany profit	0.0	0.0
(1.4)	(11.9)	Amortisation of goodwill	0.0	0.0
41.3	**105.2**		**0.0**	**0.0**
		5 Income from investments in associates before tax		
0.0	0.0	Share of result of associates before tax	(0.1)	0.0
0.0	**0.0**		**(0.1)**	**0.0**
		6 Financial income		
10.5	23.8	Interest income from Group companies	0.0	0.0
0.0	8.2	Exchange adjustments	0.0	0.0
1.9	3.2	Other financial income	10.4	2.7
12.4	**35.2**		**10.4**	**2.7**
		7 Financial expenses		
2.7	9.6	Interest paid to Group companies	0.0	0.0
1.9	0.0	Exchange adjustments	11.6	4.7
16.9	23.2	Other financial expenses	39.3	19.5
21.5	**32.8**		**50.9**	**24.2**
		8 Corporation tax		
13.5	25.6	Current tax on profit for the year	25.6	13.5
1.1	0.3	Adjustments previous years	0.3	1.1
3.7	(38.2)	Change in deferred tax	(37.7)	3.7
18.3	**(12.3)**	**Total tax for the year**	**(11.8)**	**18.3**
		which breaks down as follows:		
18.3	(12.3)	Tax on profit on ordinary activities	(11.8)	18.3
18.3	**(12.3)**	**Total tax for the year**	**(11.8)**	**18.3**
(6.1)	**(3.1)**	**Taxes paid in the year amount to**	**10.3**	**8.6**

Parent Company			Group	
2003 mEUR	2004 mEUR		2004 mEUR	2003 mEUR
		8 Tax on profit for the year is calculated as follows:		
		Calculated tax on profit for the year before tax	30.0%	30.0%
		Adjustment of tax concerning previous years	0.0%	2.1%
		Tax effect of:		
		Other non-taxable income	4.0%	(0.8)%
		Amortisation of goodwill	(9.0)%	0.6%
		Other non-deductible expenses	0.0%	0.1%
		Higher/(lower) tax rate in foreign subsidiaries and permanent establishments	(1.0)%	2.0%
			24.0%	**34.0%**

9 Intangible assets

Parent Company

	Completed development projects	Goodwill	Software	Development projects in progress	Total
	mEUR	mEUR	mEUR	mEUR	mEUR
Cost at 1 January	71.5	0.0	0.0	14.1	85.6
Additions, acquisition of company	0.0	19.2	0.0	0.0	19.2
Additions	20.2	0.0	0.0	71.3	91.5
Cost at 31 December	91.7	19.2	0.0	85.4	196.3
Amortisation at 1 January	38.3	0.0	0.0	0.0	38.3
Amortisation for the year	15.3	0.8	0.0	0.0	16.1
Amortisation at 31 December	53.6	0.8	0.0	0.0	54.4
Carrying amount at 31 December	**38.1**	**18.4**	**0.0**	**85.4**	**141.9**
Amortised over	3-5 years	5-20 years	5 years	–	–

9 Intangible assets (continued)

Group

	Completed development projects	Goodwill	Software	Development projects in progress	Total
	mEUR	mEUR	mEUR	mEUR	mEUR
Cost at 1 January	72.8	16.4	0.0	14.1	103.3
Exchange adjustments	0.0	0.0	0.0	0.0	0.0
Addition, acquisition of company	68.2	329.4	8.4	37.0	443.0
Additions	0.5	0.0	0.1	38.3	38.9
Disposals	0.0	(0.1)	(0.1)	0.0	0.0
Transfers	4.0	0.0	0.0	(4.0)	0.0
Cost at 31 December	145.5	345.7	8.4	85.4	585.0
Amortisation at 1 January	38.5	5.7	0.0	0.0	44.2
Exchange adjustments	0.0	0.0	0.0	0.0	0.0
Addition, acquisition of company	21.9	14.4	6.1	0.0	42.4
Amortisation for the year	30.5	17.2	1.5	0.0	49.2
Reversal of amortisation on disposals in the year	0.0	0.0	(0.1)	0.0	(0.1)
Amortisation at 31 December	90.9	37.3	7.5	0.0	135.7
Carrying amount at 31 December	**54.6**	**308.4**	**0.9**	**85.4**	**449.3**
Amortised over	3-5 years	5-20 years	5 years	–	–

10 Property, plant and equipment

Parent Company

	Land and buildings	Plant and machinery	Other fixtures and fittings, tools and equipment	Property plant and equipment in progress	Total
	mEUR	mEUR	mEUR	mEUR	mEUR
Cost at 1 January	134.3	160,4	41.5	17.6	353.8
Additions	10.5	6.3	4.1	0.0	20.9
Diposals, intercompany restructuring	0.0	(0.1)	(2.0)	(0.8)	(2.9)
Disposals	0.0	(150.0)	(18.1)	(7.4)	(175.5)
Transfers	1.6	3.3	(0.9)	(4.0)	0.0
Cost at 31 December	146.4	19.9	24.6	5.4	196.3
Revaluation in 1989	1.4	0.0	0.0	0.0	1.4
Depreciation at 1 January	20.3	78.2	20.1	0.0	118.6
Depreciation for the year	5.0	3.9	5.0	0.0	13.9
Reversal of depreciation on disposals in the year	0.0	(0.2)	(2.0)	0.0	(4.9)
Reversal of depreciation on disposals, inter-company restructuring	0.0	(73.5)	(12.0)	0.0	(82.8)
Transfers	(2.5)	0.9	1.6	0.0	0.0
Depreciation at 31 December	22.8	9.3	12.7	0.0	44.8
Carrying amount at 31 December	**125.0**	**10.6**	**11.9**	**5.4**	**152.9**
Including assets held under finance leases amounting to	22.4	0.0	6.5	0.0	28.9
Depreciated over	25-40 years	3-10 years	3-5 years	–	–

10 Property, plant and equipment (continued)

Group

	Land and buildings	Plant and machinery	Other fixtures and fittings, tools and equipment	Property plant and equipment in progress	Total
	mEUR	mEUR	mEUR	mEUR	mEUR
Cost at 1 January	161.0	237.4	64.9	18.2	481.5
Exchange adjustments	(1.7)	(5.2)	(0.7)	0.0	(7.6)
Addition, acquisition of company	77.9	47.9	94.9	2.5	223.2
Additions	20.7	34.6	24.8	8.5	88.6
Disposals	0.0	(26.3)	(16.0)	0.0	(42.3)
Transfers	0.0	(11.1)	29.6	(18.6)	(0.1)
Cost at 31 December	257.9	277.3	197.5	10.6	743.3
Revaluation in 1989	1.4	0.0	0.0	0.0	1.4
Depreciation at 1 January	27.1	107.4	27.2	0.0	161.7
Exchange adjustments	(0.3)	(3.4)	(0.5)	0.0	(4.2)
Addition, acquisition of company	8.4	9.6	54.9	0.0	72.9
Depreciation for the year	9.1	37.3	32.3	0.0	78.7
Reversal of depreciation on disposals in the year	0.0	(19.8)	(13.5)	0.0	(33.3)
Transfers	0.0	(8.8)	8.8	0.0	0.0
Depreciation at 31 December	44.3	122.3	109.2	0.0	275.8
Carrying amount at 31 December	**215.0**	**155.0**	**88.3**	**10.6**	**468.9**
Including assets held under finance leases amounting to	27.2	3.6	10.9	0.0	41.7
Depreciated over	25-40 years	3-10 years	3-5 years	–	–

	2004
	mEUR
Latest public valuation of Danish properties	83.1
The difference between the property value and the carrying amount of newly acquired properties and new buildings and rebuildings, which have not been reassessed, amounts to	12.2
The carrying amount of foreign properties amounts to	45.9

11 Fixed asset investments

Parent Company

	Investments in Group companies	Receivables from Group companies	Investments in associates	Other investments, deposits, etc.	Total
	mEUR	mEUR	mEUR	mEUR	mEUR
Cost at 1 January	66.2	5.3	0.7	2.8	75.0
Additions, acquisition of company	391.6	0.0	0.0	0.0	391.6
Additions	524.2	0.0	0.0	0.0	524.2
Disposals	0.0	(5.3)	0.0	(0.4)	(5.7)
Cost at 31 December	982.0	0.0	0.7	2.4	985.1
Value adjustments at 1 January	96.3	0.0	(0.2)	0.0	96.1
Exchange adjustments	(2.0)	0.0	0.0	0.0	(2.0)
Reversal of value adjustments	0.0	0.0	0.0	0.0	0.0
Profit shares for the year before tax	127.8	0.0	0.0	0.0	127.8
Tax on profit shares	(7.2)	0.0	0.0	0.0	(7.2)
Dividend	(15.1)	0.0	0.0	0.0	(15.1)
Amortisation of goodwill	(11.9)	0.0	0.0	0.0	(11.9)
Change in intercompany profit	(10.7)	0.0	0.0	0.0	(10.7)
Value adjustments at 31 December	177.2	0.0	(0.2)	0.0	177.0
Carrying amount at 31 December	**1,159.2**	**0.0**	**0.5**	**2.4**	**1,162.1**

Remaining positive difference included in the above carrying amount at 31 December	274.5

Investments in Group companies are specified as follows:

Name	Place of registered office	Share capital		Votes and ownership
Vestas Americas A/S	Randers, Denmark	tDKK	41,000	100%
Vestas Central Europe A/S	Randers, Denmark	tDKK	57,000	100%
Vestas Northern Europe A/S	Randers, Denmark	tDKK	14,000	100%
Vestas Asia Pacific A/S	Randers, Denmark	tDKK	33,000	100%
Vestas Mediterranean East A/S	Randers, Denmark	tDKK	14,000	100%
Vestas Mediterranean West A/S	Randers, Denmark	tDKK	49,100	100%
Vestas Nacelles A/S	Randers, Denmark	tDKK	343,000	100%
Vestas Blades A/S	Randers, Denmark	tDKK	91,000	100%
Vestas Control Systems A/S	Randers, Denmark	tDKK	11,000	100%
Vestas Towers A/S	Randers, Denmark	tDKK	55,000	100%
NEG Micon A/S	Randers, Denmark	tDKK	267,110	100%
Wind Power Invest A/S	Ringkøbing, Denmark	tDKK	25,000	100%
Vestas Technology UK Limited	Isle of Wight, United Kingdom	tGBP	90	100%
Vestas 1 A/S (no activity)	Randers, Denmark	tDKK	500	100%
Vestas 2 A/S (no activity)	Randers, Danmark	tDKK	500	100%
Vestas 3 A/S (no activity)	Randers, Danmark	tDKK	500	100%
Vestas 4 A/S (no activity)	Randers, Danmark	tDKK	500	100%

Investments in associates are specified as follows:

Name	Place of registered office	Share capital		Votes and ownership
Vestas RRB India Ltd.	New Delhi, India	kINR	56,200	49%

11 Fixed asset investments (continued)

Group

	Investments in associates	Receivables from associates	Other receivables	Other investments, deposits, etc.	Total
	mEUR	mEUR	mEUR	mEUR	mEUR
Cost at 1 January	1.8	0.8	2.7	3.0	8.3
Exchange adjustments	0.0	0.0	0.0	0.0	0.0
Additions, acquisition of company	2.7	0.6	3.4	1.7	8.4
Additions	0.2	0.0	0.8	0.2	1.2
Disposals	0.0	0.0	(0.8)	(0.9)	(1.7)
Cost at 31 December	4.7	1.4	6.1	4.0	16.2
Value adjustments at 1 January	(1.3)	(0.8)	(1.4)	0.0	(3.5)
Exchange adjustments	(0.1)	0.0	0.0	0.0	(0.1)
Additions, acquisition of company	(0.3)	0.0	0.0	0.0	(0.3)
Interest	0.0	0.0	0.0	0.0	0.0
Impairment losses for the year	(0.2)	0.0	(0.2)	0.0	(0.4)
Reversal of impairment losses	0.0	0.0	0.0	0.0	0.0
Value adjustments at 31 December	(1.9)	(0.8)	(1.6)	0.0	(4.3)
Carrying amount at 31 December	**2.8**	**0.6**	**4.5**	**4.0**	**11.9**

Investments in associates are specified as follows:

Name	Place of registered office	Share capital		Votes and ownership
Vestas RRB India Ltd.	New Delhi, India	tINR	56,200	49.0%
Pecsa, Plantas Eólicas De Canarias Sociedad Anónima	Las Palmas, Spain	tEUR	1,496	49.8%
Planta Eólica Europea S.A.	Tarifa, Spain	tEUR	1,199	44.0%
BWETA Assoc.	California, USA	tUSD	5,000	22.5%
Windco, LLC	California, USA	tUSD	39	38.0%
Altamont Infrastructure Company, LLC	California, USA	tUSD	–	38.0%

The following companies are consolidated pro rata:

Green Ridge Power LLC	California, USA	tUSD	2,891	50.0%
Green Ridge Services LLC	California, USA	tUSD	1,596	50.0%
Windpower Partners 1992, L.P.	California, USA	tUSD	–	50.0%
Windpower Partners 1991-2, L.P.	California, USA	tUSD	–	50.0%

Parent Company			Group	
2003 mEUR	2004 mEUR		2004 mEUR	2003 mEUR
		12 Inventories		
10.4	0.0	Raw materials and consumables	242.4	70.3
28.8	0.1	Work in progress	77.2	33.9
83.7	0.9	Finished goods	112.5	88.9
0.0	0.0	Payments on account	3.9	0.0
122.9	**1.0**		**436.0**	**193.1**
		13 Sales value of orders in progress		
261.6	0.0	Sales value of orders in progress	810.5	514.9
0.0	0.0	Invoiced on account on orders in progress	(225.2)	(177.4)
261.6	**0.0**		**585.3**	**337.5**
		14 Receivables		
23.5	0.0	Due for payment in more than 1 year after year end	33.4	23.5
		15 Deferred tax		
40.2	41.2	Balance at 1 January	50.2	44.2
0.0	0.0	Exchange adjustment	(0.1)	0.6
0.0	(21.7)	Afgang ved spaltning	0.0	0.0
0.0	0.0	Addition, acquisition of subsidiary	3.0	(1.3)
(1.3)	3.2	Deferred tax relating to forward exchange contracts	3.2	(1.3)
2.2	(19.5)	Provisions for the year	(30.5)	7.9
41.1	**3.2**	**Balance at 31 December**	**25.8**	**50.1**
		Deferred tax relates to:		
14.1	3.2	Intangible assets	3.3	14.0
(0.7)	0.0	Property, plant and equipment	0.0	(1.5)
(0.2)	0.0	Fixed asset investments	0.0	(0.2)
28.0	0.0	Current assets	22.5	37.4
(0.1)	0.0	Other payables	0.0	(0.1)
0.0	0.0	Provisions	0.0	0.5
41.1	**3.2**		**25.8**	**50.1**
		Deferred tax asset		
0.0	0.0	Intangible assets	1.4	0.1
0.0	0.0	Property, plant and equipment	0.0	0.6
0.0	0.0	Current assets	17.3	1.2
0.0	0.0	Other payables	0.0	0.5
0.0	0.0	Provisions	27.5	5.8
0,0	0.0	Tax loss	28.9	6.7
0.0	**0.0**	**Balance at 31 December**	**75.1**	**14.9**
41.1	**3.2**	**Deferred tax, net**	**(49.3)**	**35.2**

Parent Company 2003 mEUR	Parent Company 2004 mEUR		Group 2004 mEUR	Group 2003 mEUR
		16 Warranty provisions		
37.7	42.8	Warranty provisions at 1 January	97.4	85.4
0.2	0.0	Addition, merger/acqvisition of company	86.3	0.1
0.0	0.0	Exchange adjustment	(1.5)	(2.9)
0.0	(42.8)	Transfer of provisions to subsidiaries	0.0	0.0
10.7	0.0	Provisions for the year	105.8	69.0
(5.8)	0.0	Consumption for the year	(121.0)	(54.2)
0.0	0.0	Adjustment of previous warranty provisions	0.0	0.0
42.8	**0.0**	**Warranty provisions at 31 December**	**167.0**	**97.4**
		The warranty provisions are expected to mature as follows:		
26.1	0.0	0-1 years	103.5	58.4
16.7	0.0	1-5 years	59.5	39.0
0.0	0.0	> 5 years	0.0	0.0
42.8	**0.0**		**167.0**	**97.4**
		17 Other provisions		
0.0	16.8	Other provisions, 1 January	16.8	0.0
16.8	44.9	Provisions for the year	44.9	16.8
0.0	36.9	Consumption for the year	(36.9)	0.0
0.0	(5.0)	Adjustment to previous provisions	(5.0)	0.0
16.8	**19.7**	**Other provisions at 31 December**	**19.7**	**16.8**
		The provisions are expected to mature as follows:		
6.1	7.4	0-1 years	7.4	6.1
10.7	12.3	1-5 years	12.3	10.7
16.8	**19.7**		**19.7**	**16.8**
		18 Pension obligations		
0.0	0.0	Pension obligation, net 1 January	1.2	0.0
0.0	0.0	Pension obligation, net acquisition of company 31 March 2003	0.0	1.5
0.0	0.0	Exchange adjustment	0.0	(0.1)
0.0	0.0	Provisions for the year	0.0	0.4
0.0	0.0	Consumption for the year	0.0	(0.6)
0.0	**0.0**	**Pension obligation, net at 31 December**	**1.2**	**1.2**
		The pension obligation is calculated based on actuarial assumptions, including a discounting factor of 6% and expected yield on pension funds of 7%.		

Parent Company 2003 mEUR	Parent Company 2004 mEUR		Group 2004 mEUR	Group 2003 mEUR
		19 Long-term debt		
		The debt breaks down as follows:		
		Mortgage debt:		
52.1	89.5	Long-term	92.9	55.6
2.6	6.5	Short-term	8.7	4.1
54.7	**96.0**	Total mortgage debt	**101.6**	**59.7**
		Credit institutions:		
48.9	353.3	Long-term	379.5	50.0
4.7	16.4	Short-term	22.5	4.9
53.6	**369.7**	Total, credit institutions	**402.0**	**54.9**
		The debt is recognised in the balance sheet as follows:		
101.0	442.8	Long-term debt	472.4	105.6
7.3	22.9	Short-term debt	31.2	9.0
108.3	**465.7**		**503.6**	**114.6**
81.3	**99.7**	Long-term debt falling due for payment after 5 years from year end (carrying amount)	**101.1**	**81.3**

19 Long-term debt (continued)

Obligations from finance leases:

The following amounts recognised in long-term debt relate to assets under finance leases:

Parent Company

	2004			2003		
	Lease payment	Interest	Carrying amount	Lease payment	Interest	Carrying amount
	mEUR	mEUR	mEUR	mEUR	mEUR	mEUR
0-1 years	4.6	0.9	3.7	7.1	1.8	5.3
1-5 years	9.8	2.8	7.1	16.9	5.4	11.5
> 5 years	28.3	7.7	20.6	33.6	11.9	21.7
	42.7	**11.4**	**31.4**	**57.6**	**19.1**	**38.5**
Weighted effective rate of interest at the balance sheet date			2.9%			3.1%

19 **Long-term debt (continued)**

Obligations from finance leases:

The following amounts recognised in long-term debt relate to assets under finance leases:

Group

	2004			2003		
	Lease payment	Interest	Carrying amount	Lease payment	Interest	Carrying amount
	mEUR	mEUR	mEUR	mEUR	mEUR	mEUR
0-1 years	8.9	1.6	7.3	7.1	1.8	5.3
1-5 years	18.8	3.7	15.1	16.9	5.4	11.5
> 5 years	28.8	7.7	21.1	33.6	11.9	21.7
	56.5	**13.0**	**43.5**	**57.6**	**19.1**	**38.5**
Weighted effective rate of interest at the balance sheet date			3.2%			3.1%

The finance lease agreements of the Parent Company and the Group mainly relate to administration- and production buildings, service vans and IT equipment.

Parent Company			Group	
2003 mEUR	2004 mEUR		2004 mEUR	2003 mEUR
		20 Employees		
		Employee expenses break down as follows:		
180.0	26.6	Wages and salaries	359.5	266.7
8.1	0.0	Pension	13.7	11.4
1.2	2.9	Remuneration to the Board of Management in the Parent Company	2.9	1.2
0.3	0.3	Remuneration to the Board of Directors	0.3	0.3
1.5	0.3	Other social security expenses	21.8	7.2
191.1	**30.1**		**398.2**	**286.8**
4,085	**479**	**Average number of employees**	**9,449**	**6,394**

20 Employees (continued)

The Board of Directors, the Board of Management and senior executives are comprise by a warrant scheme. The purpose of this scheme is to make sure that management, employees and shareholders have the same objectives, and to maintain and attract employees. The acquisition of the rights is conditional on the warrant holder not being under notice or being a member of the Board of Directors of Vestas.

At the beginning of 2003, the existing incentive scheme consisted of a total of 372,926 warrants.

No warrants were offered in 2003, but 3,500 warrants were cancelled. No warrants were offered in 2004, but 259,426 warrants were cancelled.

The remaining 110,000 warrants offered in second half of 2002 may be exercised in the period 1 April 2004 - 1 April 2005 at a price of EUR 15.3.

	Board of Directors	Board of Management	Senior executives	Total	Average exercise price	Average expected term to maturity
	Number	Number	Number	Number	EUR	Year
Outstanding at 1 January 2003	30,506	95,612	246,808	372,926	45.8	1.4
Offered in 2003	–	–	–	–	–	
Cancelled in 2003	–	–	3,500	3,500	15.3	
Exercised in 2003	–	–	–	–	–	
Outstanding at 31 December 2003	**30,506**	**95,612**	**243,308**	**369,426**	**46.0**	**0.6**
Offered in 2004	–	–	–	–	–	
Cancelled in 2004	22,506	68,112	168,808	259,426	59.1	
Exercised in 2004	–	–	–	–	–	
Outstanding at 31 December 2004	**8,000**	**27,500**	**74,500**	**110,000**	**15.3**	**0.3**

20 Employees (continued)

	Board of Directors	Board of Management	Senior executives	Total
	kEUR	kEUR	kEUR	kEUR
Market value at 31 December 2003	**27**	**96**	**261**	**384**
Market value at 31 December 2004	–	–	–	–
Outstanding at year-end per offering				
Offered in second half of 2002				110,000
				110,000

The market value of the warrant scheme has been calculated on the basis of the Black-Sholes model for the valuation of options adjusted for "dilution" of the share capital. The following assumptions have been applied for the calculation of the value at the end of 2004: a market price of EUR 8.8, dividend per share of EUR 0, volatility of 35%, risk-free interest rate in the range 2.1% and expected term to maturity of 0.3 years.

21 Segment information

Group 2004

	Net turnover	Profit before financial income and expenses	Segment assets	Segment liabilities
	mEUR	mEUR	mEUR	mEUR
Europe	1,695.2	(4.9)	2,010.6	872.4
Rest of the world	866.0	(4.1)	195.8	174.8
	2,561.2	**(9.1)**	**2,206.4**	**1,047.2**

Group 2003

	Net turnover	Profit before financial income and expenses	Segment assets	Segment liabilities
	mEUR	mEUR	mEUR	mEUR
Europe	1,205.3	57.1	979.2	427.5
Rest of the world	447.2	17.1	166.9	46.2
	1,652.5	**74.2**	**1,146.1**	**473.7**

22 Related parties

The Vestas Group consists of the Parent Company, Vestas Wind Systems A/S, and a number of wholly-owned subsidiaries and associates. The subsidiaries are organised in 4 global production units and 6 regional sales and service units. The Parent Company develops wind turbines, which are produced in the global production units and are sold through the regional sales and service units.

Intercompany transactions in the Group therefore comprise purchase and sale of sub-components for wind turbines (nacelles, towers, blades, controls, etc) and related activities in the form of assistance relating to service, etc.

The associates comprise Vestas RRB India Ltd. (49% ownership) and a number of companies whose main object is the operation of wind turbines.

Trade with the associate Vestas RRB India Ltd. is based on prior transfer of know-how concerning the Vestas technology as well as the sale of sub-components that enable the associate to produce wind turbines in accordance with the Vestas technology.

Moreover, to a minor extent, the trade with Vestas RRB India Ltd. also comprises assistance from the Parent Company's development department and assistance in the form of service, etc. The trade takes place on an arm's length basis. For competitive reasons, revenue relating to this is not disclosed; however, it makes up less than 2% of the Group's total revenue.

Apart from this, there have been no transactions with the Supervisory Board, the Executive Board or other related parties, except for intercompany transactions which have been eliminated in the consolidated financial statements and normal management remuneration.

23 Mortgages and security

Parent Company

As security for the Company's mortgage loans, mortgage deeds registered to the mortgagor and letters of indemnity at a nominal amount of mEUR 31.3 have been issued in land and buildings, plant and machinery as well as other fixtures and fittings, tools and equipment. The carrying amount of the assets provided as security is mEUR 102.6 at 31 December 2004. Total mortgage loans amount to mEUR 96.0 at 31 December 2004.

Furthermore, the Company has issued mortgage deeds registered to the mortgagor and letters of indemnity totalling mEUR 49.9 which provide mortgage in the above-mentioned properties. These mortgage deeds registered to the mortgagor and letters of indemnity are all in the possession of the Company.

Group

As security for the Group's mortgage loans, mortgage deeds registered to the mortgagor and letters of indemnity at a nominal amount of mEUR 77.2 have been issued in land and buildings, plant and machinery as well as other fixtures and fittings, tools and equipment. The carrying amount of the assets provided as security is mEUR 151.2 at 31 December 2004. Total mortgage loans amount to mEUR 101.6 at 31 December 2004. In addition, some of the Group's other property, plant and equipment, the carrying amount of which is mEUR 4.6 at 31 December 2004, has been placed as security for a nominal amount of mEUR 1.4.

Furthermore, the Group has issued mortgage deeds registered to the mortgagor and letters of indemnity totalling mEUR 49.9 which provide mortgage in the above-mentioned properties. These mortgage deeds registered to the mortgagor and letters of indemnity are all in the possession of the Group.

As security for credit facilities, the Group has transferred its cash at bank and in hand and other current assets at a value of mEUR 38.6.

24 Contractual obligations

Parent Company

	2004	2003
	mEUR	mEUR
The lease obligation relating to operating leases comprises leased buildings and falls due as follows:		
Within 1 year	4.3	4.1
Between 1 and 5 years	18.1	17.7
After 5 years	5.7	10.4
	28.1	**32.2**

24 Contractual obligations (continued)

Group

	2004	2003
	mEUR	mEUR
The lease obligation relating to operating leases comprises leased buildings and cars and falls due as follows:		
Within 1 year	12.7	9.9
Between 1 and 5 years	42.0	40.7
After 5 years	41.7	77.2
	96.4	**127.8**

The Group has entered into contracts concerning delivery of plant in 2005 at a value of approximately mEUR 6.8.

25 Contingent liabilities

Parent Company

Work and payments guarantees, etc. provided amount to mEUR 171.3.

In addition to this the Parent Company has as part of usual operations provided performance bonds in connection with project supplies in subsidiary companies.

The Company has provided guarantees for the bank debt of Group companies at a maximum of mEUR 84.2, and has provided guarantees for loan financing and security in wind power projects totalling mEUR 0.6.

Group

Work and payment guarantees, etc. provided amount to mEUR 759.7.

The Group has provided guarantees for loan financing and security in wind power projects totalling mEUR 0.6.

26 Financial instruments, interest rate risks and credit risks

Parent Company and Group

Forward exchange contracts, net sales/(purchases)

	Contractual amounts stated at strike prices	Value at exchange rates at 31.12.04	Unrealised gains/ (losses) at 31.12.04	Deferred recording	Maturity periods
	mEUR	mEUR	mEUR	mEUR	
USD	(33.7)	(33.7)	0.0	0.0	Jan. - July 2005
USD	204.9	197.2	7.7	2.2	Jan. 2005 - Nov. 2006
SEK	(6.7)	(6.7)	0.0	0.0	Jan. 2005
SEK	3.3	3.3	0.0	0.0	Jan. - March 2005
NOK	13.3	13.3	0.0	0.0	Jan. 2005
CAD	(6.1)	(6.1)	0.0	0.0	Jan. 2005
CAD	113.5	108.1	5.4	5.4	Feb. 2005 - April 2006
AUD	76.6	77.0	(0.4)	(0.2)	Jan. 2005 - Feb. 2006
GBP	164.2	160.9	3.3	3.3	Jan. - Nov. 2005
EUR	(690.8)	(690.8)	0.0	0.0	Jan. 2005 - Nov. 2006
INR	31.6	31.4	0.2	0.2	Feb. - Aug. 2005
DKK	222.1	222.2	(0.1)	0.0	Jan. 2005
	92.2	**76.1**	**16.1**	**10.9**	

Other financial instruments

Moreover, in order to hedge currency risks, the Company has entered into foreign exchange put-options with a contract amount of mUSD 287.8 million (mEUR 211.6) expiring in 2005. The fair value is positive by mEUR 1.3.

With a view to reducing the Group's interest risk on variable interest loans, the Company has entered into interest swaps by which variable interest payments are converted into fixed interest payments. The notional principal amount totals mEUR 174.2 and expires as follows:

2006-2008: kEUR 110,000
2010-2012: kEUR 52,821
2018-2022: kEUR 11,377

Moreover, the Company has entered into an interest collar with a notional principle amount of mEUR 30.0 expiring in 2006.

At 31 December 2004, the fair value is negative by mEUR 5.2 million. This amount includes a recognition of mEUR 2.5 in equity.

The financial instruments listed above have been entered into in order to reduce the Parent Company's and the Group's foreign exchange risks on orders placed, receivables and payables and in order to reduce the Group's interest rate risks.

26 Financial instruments, interest rate risks and credit risks (continued)

Interest rate risks

The summary below specifies the agreed times of revaluation and payment in respect of the Group's financial obligations.

	Time of revaluation/maturity			Hereof fixed interest	Effective interest rate %
	< 1 year	1 - 5 years	> 5 years		
	mEUR	mEUR	mEUR	mEUR	
Mortgage debt	(8.7)	(33.0)	(59.9)	14.9	3.7%
Credit institutions	(22.5)	(338.3)	(41.2)	31.8	2.9%
Bank loans	(78.7)	0.0	0.0	0.0	2.8%
Rent and operating leases	(12.7)	(42.0)	(41.7)	0.0	3.3%
	(122.6)	**(413.3)**	**(142.8)**	**46.7**	

Credit risks

In a number of cases, the Group receives guarantees for credit sales, and guarantees received are included in the assessment of a possible need for provision for bad debts. Such guarantees may consist of financial guarantees etc. Without considering guarantees received, the Group's maximum credit risks amount to mEUR 1,475.9.

27 Cash flow statement – adjustments

	2004	2003
	mEUR	mEUR
Amortisation, depreciation and write-downs for the year of intangible assets and property, plant and equipment, including gains and losses on sale of fixed assets	127.1	68.1
Share of result of associates before tax	0.1	0.0
Warranty provisions, net	(15.2)	14.8
Provision for pension obligations	0.0	(0.2)
Provision for other obligations	2.9	16.8
Minority interests	1.3	0.0
Exchange adjustments	5.2	(2.9)
Financial income	(10.4)	(2.7)
Financial expenses	50.9	24.1
Corporation tax	(11.8)	18.3
	150.1	**136.3**

28 Cash flow statement – change in working capital

	2004	2003
	mEUR	mEUR
Change in inventories	(13.6)	35.9
Change in receivables	(248.2)	(97.6)
Change in trade payables, prepayments from customers and other payables	171.9	72.9
	(89.9)	**11.2**

29 Acquisition of company

	2004	2003
	mEUR	mEUR
Fixed assets	283.8	11.7
Cash at bank and in hand	31.0	1.1
Other current assets	540.0	13.5
Provisions	(89.4)	(2.2)
Long-term debt	(214.6)	(8.6)
Short-term debt	(426.5)	(13.9)
Net assets	**124.4**	**1.6**
Goodwill	286.4	11.1
Cost	**410.8**	**12.7**

30 Cash at bank and in hand

	2004	2003
	mEUR	mEUR
Accounts held as collateral	56.5	0.0
Other cash at bank and in hand	136.2	20.4
	192.7	**20.4**

Gross margin	=	$\frac{\text{Gross profit}}{\text{Net turnover}} \times 100$
Net profit ratio (EBITDA)	=	$\frac{\text{Profit before financial income and expenses, tax, depreciation and amortisation}}{\text{Net turnover}} \times 100$
Net profit ratio (EBIT)	=	$\frac{\text{Profit before financial income and expenses}}{\text{Net turnover}} \times 100$
Return on investment 1	=	$\frac{\text{Profit before financial income and expenses}}{\text{Average operating assets *}} \times 100$
Return on investment 2 (ROCE)	=	$\frac{\text{Profit before financial income and expenses + financial income}}{\text{Average working capital **}} \times 100$
NetWorkingCapital	=	Stocks + debtors – tax assets – prepayments from customers – trade creditors – other liabilities
Solvency ratio	=	$\frac{\text{Equity, year end}}{\text{Total assets}} \times 100$
Return on equity	=	$\frac{\text{Profit on ordinary activities after tax}}{\text{Average equity}} \times 100$
Profit per share	=	$\frac{\text{Profit on ordinary activities after tax}}{\text{Average number of shares}}$
Growth in profit per share	=	$\frac{\text{Change in profit per share}}{\text{Profit per share, beginning of year}} \times 100$
Net asset value per share	=	$\frac{\text{Equity, year end}}{\text{Number of shares, year end}}$
Price/net asset value	=	$\frac{\text{Market price, year end}}{\text{Net asset value, year end}}$
P/E value	=	$\frac{\text{Market price, year end}}{\text{Profit per share}}$
Cash flow from operations per share	=	$\frac{\text{Cash flows from operating activities}}{\text{Average number of shares}}$
Gearing	=	$\frac{\text{Interest-bearing liabilities, year end}}{\text{Equity, year end}} \times 100$
Dividend per share	=	$\frac{\text{Dividend rate x nominal value of share}}{100}$
Payout ratio	=	$\frac{\text{Total dividend paid}}{\text{Net profit for the year}} \times 100$

** Operating assets comprise total assets less cash and cash equivalents as well as fixed asset investments.*
*** Working capital comprises total liabilities less non-interest-bearing liabilities.*

The Board of Management and the Board of Directors have today considered and adopted the Annual Report of Vestas Wind Systems A/S for 2004.

The Annual Report has been prepared in accordance with the Danish Financial Statements Act, Danish Accounting Standards and the general requirements of the Copenhagen Stock Exchange in respect of the financial reporting of listed companies. We consider the accounting policies applied appropriate and the accounting estimates reasonable. Furthermore, we consider the overall annual report presentation true and fair. Therefore, in our opinion, the Annual Report gives a true and fair view of the financial position of the Group and the Parent Company and of the results of the Group and Parent Company operations and consolidated cash flows.

The Supplementary Report, comprising the Environmental Statement of Vestas Wind Systems A/S, gives a true and fair view within the frameworks of generally accepted standards in this respect.

We recommend that the Annual Report be adopted at the Annual General Meeting.

Randers, 30 March 2005

Board of Management

Svend Sigaard
President and CEO

Henrik Nørremark
Executive Vice President and CFO

Mogens Filtenborg
Executive Vice President and CTO

Jens Anders Jensen
Executive Vice President and CSO

Knud Andersen
Executive Vice President and CPO

Board of Directors

Bent Erik Carlsen
Chairman of the Board of Directors

Arne Pedersen

Kim Hvid Thomsen

Svend Åge D. Andersen

Jørgen Huno Rasmussen

Torsten Erik Rasmussen

Jørn Ankær Thomsen

Freddy Frandsen

Jesper Søndermark

To the shareholders of Vestas Wind Systems A/S

We audited the annual report of Vestas Wind Systems A/S for the financial year 1 January - 31 December 2004 prepared in accordance with the Danish Financial Statements Act, Danish accounting standards and the Copenhagen Stock Exchange financial reporting requirements for listed companies. Our audit did not comprise the pro forma figures and the Supplementary Report, comprising Environmental Statement 2004, on pages 92-107.

The annual report is the responsibility of the Company's Board of Management and Board of Directors. Our responsibility is to express an opinion on the annual report based on our audit.

According to agreement with the Company's Board of Management and Board of Directors, PricewaterhouseCoopers reviewed the Supplementary Report, comprising Environmental Statement 2004 and issued a separate report on this on page 106.

Basis of opinion

We conducted our audit in accordance with Danish Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance that the annual report is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the annual report. An audit also includes assessing the accounting policies used and significant estimates made by the Board of Management and Board of Directors, as well as evaluating the overall annual report presentation. We believe that our audit provides a reasonable basis for our opinion.

Our audit did not result in any qualification.

Opinion

In our opinion, the annual report gives a true and fair view of the Group's and the Company's financial position at 31 December 2004 and of the results of the Group's and the Company's operations and consolidated cash flows for the financial year 1 January - 31 December 2004 in accordance with the Danish Financial Statements Act, Danish Accounting Standards and the Copenhagen Stock Exchange financial reporting requirements for listed companies.

Herning, 30 March 2005

PricewaterhouseCoopers
Statsautoriseret Revisionsinteressentskab

Carsten Gerner
State Authorised Public Accountant

Niels Jørgen Lodahl
State Authorised Public Accountant

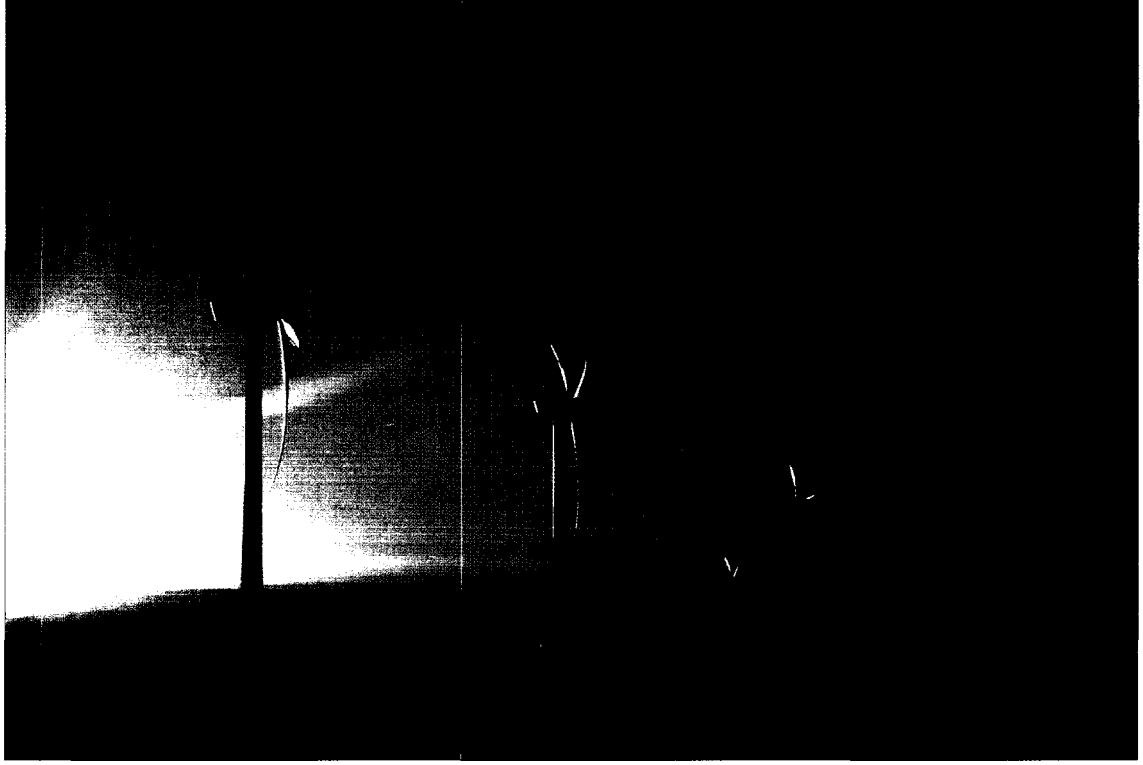
Århus, 30 March 2005

KPMG C.Jespersen
Statsautoriseret Revisionsinteressentskab

Flemming Brokhattingen
State Authorised Public Accountant

Claus Monfeldt
State Authorised Public Accountant

Lake Bonney, Australia is the site of 46 V66-1.75 MW wind turbines



One of the projects Vestas has completed on the Australian market is the erection of 46 V66-1.75 MW wind turbines by Lake Bonney Near Mount Gambier in the south of the country.

Management's environmental statement

The purpose of the environmental statement is to report and document environmental and occupational health and safety aspects at Vestas Wind Systems A/S. The environmental statement describes the overall objectives of Vestas' environmental and occupational health and safety work. It presents data reports and results achieved in 2004, and contains in-depth articles about specific areas at Vestas. In addition, it presents expectations for the future as regards environmental and occupational health and safety issues.

The environmental and occupational health and safety policy apply to all activities

Vestas develops and manufactures wind power systems that generate sustainable energy for consumers throughout the world. Vestas delivered 2,784 MW in 2004. The power generated annually by these turbines corresponds to the annual electricity consumption of approximately 2.1 million Danish households.[1] The power generated annually by the turbines delivered means savings of approximately 4,009,000 tons of CO_2 in relation to the electricity generated in Europe, as on average the generation of European electricity results in emissions of 548 grams of CO_2 per kWh.[2]

Vestas' environmental and occupational health and safety policy was revised in 2004. The most significant changes have to do with stressing that safety is always to have top priority, and that, as far as possible, Vestas' global activities must comply with Danish environmental and occupational health and safety legislation as standard – although with all due consideration for other national regulations and cultural differences.

Vestas' policy on the environment and occupational health and safety apply to all activities within the Vestas Group, and Vestas' objective is for all its employees to work with and according to the same environmental and occupational health and safety management system. In this way, the Group ensures that the environment and occupational health and safety are integrated into all stages of the process, from development and manufacture to sale, erection and service of the wind power systems. This, in turn, contributes to making improvements for the benefit of customers, shareholders, employees, other stakeholders and the environment.

The proportion of employees working at sites that have been certified and included in the environmental statement fell as a result of the combination with NEG Micon. This was due to the fact that NEG Micon did not operate environmental and occupational health and safety management systems or environmental reporting to the same extent as Vestas, cf. figure 1 on page 93.

Vestas' objective is still for all its activities to be certified according to the ISO 14001 environmental management standard and the OHSAS 18001 occupational health and safety standard. In line with this objective, it is pleasing to note that a further 9 per cent of those employed by the Vestas Group (878 people) now work at sites certified according to the ISO 14001 standard, and a further 11 per cent (1,065 people) are employed at sites certified according to the OHSAS 18001 standard, cf. figures 2 and 3 on page 93.

[1] *"Energy Statistics 2003", which is published by the Danish Energy Agency, states the electricity consumption for 2003 for an average Danish household exclusive electricity for heating to 3,430 kWh per year.*

[2] *Calculation based on "Opdatering af UMIP-databasen" (Updating the UMIP database), work report from the Danish Environmental Protection Agency, No. 27, 2002.*

Figure 1:

	Before the combination (%)	After the combination (%)	At 31 December 2004 (%)
ISO 14001	71	48	57
OHSAS 18001	64	40	51
Included in the environmental statement	68	45	61

The figure shows the development in the number of ISO 14001 and OHSAS 18001 certificates and the environmental statement for 2004.

Vestas continues to work towards its objective of an annual environmental statement that covers all the sites controlled by the Group, cf. figure 4 on page 93. It is thus pleasing to note that the expansion has continued such that the scope of the environmental statement for 2004 has been extended by 16 per cent, which is equivalent to 1,602 employees. The sites newly added to the environmental statement are: the nacelle factories in Galicia, Spain, and Wynyard, Australia; the tower and nacelle factory in Campbeltown, Scotland; the blade factory in Lauchhammer, Germany; and the sale and service unit in Husum, Germany. The list below names the sites covered by the 2004 environmental statement along with the year in which they were included for the first time:

2000 Vestas Towers – Varde, Denmark
Vestas Nacelles – Viborg, Denmark
Vestas Nacelles – Ringkøbing, Denmark
Vestas Nacelles – Lem, Denmark
Vestas Blades – Lem, Denmark
Vestas Blades – Nakskov, Denmark
Vestas Blades – Skjern, Denmark
Vestas Control Systems – Lem, Denmark
Vestas Northern Europe and Vestas Blades – Videbæk, Denmark

2002 Vestas Northern Europe – Falkenberg, Sweden

2003 Vestas Control Systems – Århus, Denmark
Vestas Mediterranean East, Vestas Blades and Vestas Nacelles – Taranto, Italy
Vestas Central Europe – Rheden, the Netherlands

2004 Vestas Nacelles – Galicia, Spain
Vestas Nacelles – Wynyard, Australia
Vestas Towers and Vestas Nacelles – Campbeltown, Scotland
Vestas Blades – Lauchhammer, Germany
Vestas Central Europe – Husum, Germany

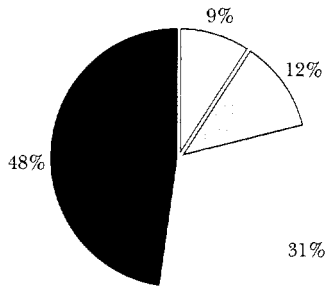
Detailed information about the environmental and occupational health and safety aspects of the sites included in the environmental statement is listed separately in the site descriptions for each facility. Site descriptions and other information about the environment and occupational health and safety are published online at www.vestas.com under the menu header "Environment".

Objectives

Vestas has highlighted waste, energy, absence due to illness, industrial injuries and environmental improvements of the product as the most significant aspects as regards the environment and occupational health and safety. Developments within the separate areas are followed continuously at all the

Figure 2:

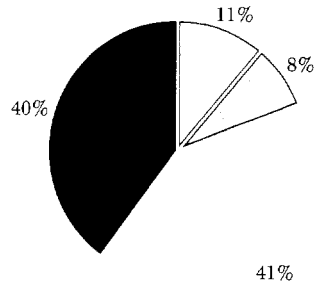
Percentage of Vestas, which is ISO 14001 certified (measured in relation to the numer of employees)



- ■ ISO 14001
- ☐ ISO 14001 certified in 2004
- ☐ Scheduled for ISO 14001 certification in 2005
- ☐ Not certified

Figure 3:

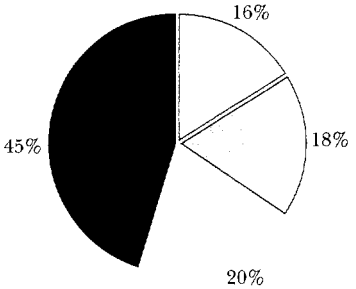
Percentage of Vestas, which is OHSAS 18001 certified (measured in relation to the number of employees)



- ■ OHSAS 18001
- ☐ OHSAS 18001 certified in 2004
- ☐ Scheduled for OHSAS 18001 certification in 2005
- ☐ Not certified

Figure 4:

Percentage of Vestas included in the environmental statement (measured in relation to the number of employees)



- ■ Included in the environmental statement
- ☐ Inculuded in 2004
- ☐ Scheduled for inclusion in 2005
- ☐ Not included

Vestas' policy for the Environment and Occupational Health and Safety is:	Vestas implements this policy by:
• to give highest priority to safety • to achieve continuous improvements in the fields of the environment and occupational health and safety • to devote the necessary care as regards development, manufacture, service procedures and disposal • to integrate consideration for employees and surroundings in the planning and performance of activities • to ensure an open-minded and honest communication with the employees and other stakeholders • to optimise the utilisation of resources • to exert influence on suppliers so that they deliver environmentally safe products and services • to ensure that, as a minimum, Vestas' activities comply with national legislation concerning environment and occupational health and safety.	• maintaining a certifiable management system according to ISO 14001 and OHSAS 18001 • integrating consideration for the environment and occupational health and safety in the development of products and processes • communicating knowledge about the environment, occupational health and safety and improvement of health to the employees and other stakeholders • measuring and documenting Vestas' impacts on employees and surroundings • preparing an annual external environmental statement • ensuring that Vestas' activities comply with national legislation and respect the Danish level wherever possible as the Vestas standard.

sites in question. On the basis of this work, significant areas of initiative are highlighted and specific improvement targets are laid down for all the sites concerned.

Energy consumption and the volume of waste generated are considered significant environmental aspects due to the quantitative scope. Therefore, the objective is to reduce the volumes of both waste generated and energy consumption. Moreover, Vestas wishes to contribute to the spread of sustainable energy by purchasing sustainable energy for its own activities. In 2004, sustainable energy accounted for 52 per cent of Vestas' total energy consumption.

The emphasis placed on absence due to illness and industrial injuries highlights the fact that Vestas considers employees to be the most important resource in the company's work to maintain its position as the leading supplier of wind power systems in the world.

Environmental improvement of the product should be seen as a long-term desire to reduce impact on the external environment and to improve the working environment. Vestas wishes to reach this objective by continuously developing more efficient wind turbines and by incorporating environmental and occupational health and safety considerations in the development of the turbines themselves. This is accomplished by viewing wind turbines from a life cycle perspective during the product development process, where, for example, the choice of technology is made on the basis of the environmental and occupational health and safety impact linked to each phase of the wind turbine life cycle.

Employee involvement

Employees are the Group's most important asset and are therefore involved in all phases of the environmental and occupational health and safety work. Employee involvement is thus an important part of everything from the identification of environmental and occupational health and safety aspects to the preparation of action plans and the establishment of targets. One of the tools used in this work is integrated product development, which involves employees from all parts of the organisation participating in the development of the wind power systems so as to ensure that environmental and occupational health and safety considerations are included in the evaluation of each solution proposed on a par with the other decision-making parameters.

Vestas is an international Group and involvement of employees is carried out with due consideration to this fact. Local conditions such as culture and legislation mean that the methods for involving employees are established locally as far as possible.

Suppliers

Vestas makes high demands on environmental and occupational health and safety aspects within the Group, so it is natural for the company to evaluate such aspects when selecting suppliers to the Group. Vestas expects all its suppliers to comply by existing legislation and to act responsibly with regard to the environment and occupational health and safety. At the same time, it should be stressed that Vestas recommends that suppliers obtain certification according to recognised management standards for quality, the environment and occupational health and safety.

Selected suppliers are also contractually obliged to observe the international set of ethical regulations laid down, and to abide by Vestas' chemical and material blacklist. The chemical and material blacklist are published online at www.vestas.com under the heading "Environment".

Events in 2004

In 2004, Vestas experienced two tragic accidents that had fatal consequences. Vestas' management neither can nor will accept risks to the safety of its employees and the two accidents have increased the focus even more clearly on employee safety. The causes of the two incidents have been investigated, and it was established that the product and the documentation material pertaining to the performance of the work did live up to the applicable requirements. Both accidents occurred because safety regulations had been ignored, and the management has therefore stressed to all employees that all safety regulations must be followed and that safety must always be given the highest priority – as is clearly stated in Vestas' policy on the environment and occupational health and safety.

The incidents naturally affected all areas of the Vestas organisation, and a number of initiatives have been implemented to ensure that accidents of this kind never happen again. For example, a new training programme for safety procedures has been set up and will be run for all employees who work in and around installed turbines.

Results in 2004

The development in absence due to illness in 2004 shows that work on environmental and occupational health and safety management does pay off, as absence due to illness was cut by 20 per cent (from 4.4 per cent to 3.5 per cent) during 2003 to 2004.

The work to map the various aspects of environmental and occupational health and safety impact within the casting group Windcast Group AS continued in 2004. On the basis of this mapping process, the conditions registered were evaluated and prioritised, leading to initiatives including the implementation of action plans for improving the occupational health and safety. Additionally plans for reducing external noise and emissions are in operation.

In 2004, Vestas completed a life cycle assessment of the V90-3.0 MW turbine. The results of this assessment highlight the positive results of the product development carried out in that with the V90-3.0 MW turbine, Vestas has improved the energy balance even further. In this context, "energy balance" is taken to mean an expression for the time it takes the wind turbine to generate the same volume of energy as is used throughout its life cycle – i.e. from extraction of the raw materials to final disposal. Compared to that of a V80-2.0 MW offshore turbine, the energy balance for a V90-3.0 MW offshore model has been improved from 6.8 months to 9.0 months. This result highlights the fact that Vestas is living up to its aim of developing turbines that continue to improve in all areas – including that of the environment. The life cycle assessments for V90-3.0 MW and V80-2.0 MW are both prepared according to the principals in ISO 14040-14043.

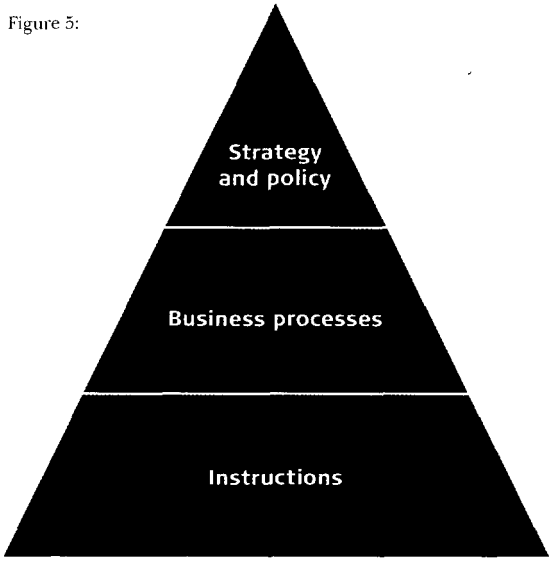
Since 2003, Vestas has been participating in a project focusing on making use of hardened composite materials – primarily in connection with ex-service wind turbine blades. In 2003, it proved possible to exploit the energy from the composite materials in a combined heat and power plant while simultaneously reducing the volume requiring disposal as landfill. In 2004, work continued on decomposition and treatment techniques intended to make it possible to break down the composite materials into uniform material types, as a number of recycling options are available for uniform materials. The current status is that technical solutions have been developed for both the decomposition and subsequent recycling of parts of the materials, but these solutions need to be developed further before they are commercially competitive. This work will continue in 2005.

It is satisfactory to note that the work to expand the scope of certified environmental and occupational health and safety management systems continued in 2004. The controller factory in Hammel, Denmark, was certified to the OHSAS 18001 occupational health and safety standard, while the sales and service unit in Husum, Germany was certified to the same standard and was also awarded environmental certification to the ISO 14001 standard.

Environmental and occupational health and safety management at Vestas

Vestas works systematically to improve the environmental and occupational health and safety aspects of the process from the development and manufacture to the sale, erection and service of wind power systems.

Figure 5:



The figure shows the structure of the management system at Vestas.

The aim is for all Vestas employees to work with and according to the same management systems for the environment and occupational health and safety. By implementing a global management system, Vestas will be in a position to create improvements for the benefit of customers, shareholders, employees, other stakeholders and the environment.

The management system is built up around an overall strategy for the environment and occupational health and safety, a strategy concretised in an environmental and occupational health and safety policy that applies to all areas of the Vestas Group. A number of overriding requirements have been laid down for this work on the environment and occupational health and safety, and these requirements have also been integrated into Vestas' process model. Everyday work processes are described in a range of business procedures and instructions that are supported by a variety of auxiliary tools. The Vestas process model has been built up so as to ensure that, as a minimum, all the requirements of the ISO 9001, ISO 14001 and OHSAS 18001 quality, environmental and occupational health and safety standards are met. For example, reports have to be filed about significant environmental and occupational health and safety aspects at fixed, regular intervals. The reporting procedure is a tool for Vestas' management to follow up on all significant environmental and occupational health and safety aspects throughout the Group. The management system is illustrated in figure 5.

A range of Vestas' activities have already been certified to ISO 9001, ISO 14001 and/or OHSAS 18001 standard. This documents the fact that the requirements in Vestas' process model – and, as a result, the individual management standards – are met. For example, documentation shows that work is carried out in a structured manner according to a management cycle in which the environment and occupational health and safety are mapped and prioritised annually. Action plans are subsequently prepared and published for the entire organisation. Finally, overriding targets are laid down for the entire area, and audits are carried out to evaluate both the suitability and the efficiency of the management systems.

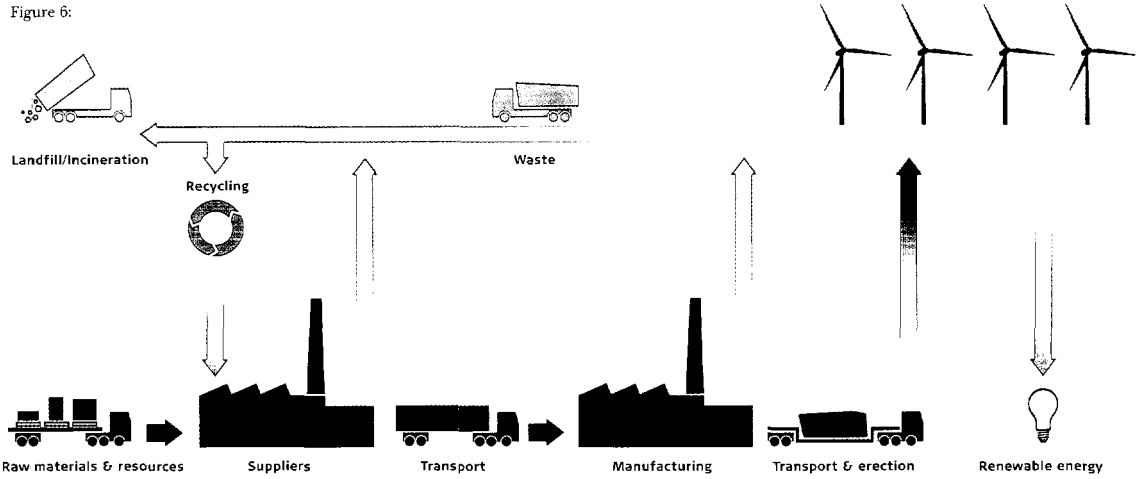
Responsibility for environmental and occupational health and safety aspects follows Vestas' organisational structure. Environmental and occupational health and safety functions have been set up in each business unit and in Vestas' staff department to collate, utilise and disseminate knowledge and experience.

Principal activities	Achieved	Ongoing and future tasks
System		**System**
Certification of selected functions according to the ISO 14001 and OHSAS 18001 standards Vestas Control Systems in Hammel, Denmark, was certified in accordance with the OHSAS 18001 standard, and the sales and service unit Vestas Central Europe in Husum, Germany, was certified according to the ISO 14001 and OHSAS 18001 standards.	√	**Certification of selected organisational units according to the ISO 14001 and OHSAS 18001 standards** Vestas will continue to systematise the work on environmental and occupational health and safety aspect through the introduction of certified management systems for all Vestas activities. The target for 2005 is that additional 12 per cent of the organistion is covered by an ISO 14001 certificate and additional 8 per cent is covered by an OHSAS 18001 certificate.
Expansion of Vestas' environmental statement to cover more departments The environmental statement has been expanded to include five new sites: Vestas Towers and Vestas Nacelles – Campbeltown, Scotland; Vestas Nacelles – Galicia, Spain; Vestas Nacelles – Wynyard, Australia; and Vestas Blades – Lauchhammer and Vestas Central Europe – Husum, Germany.	√	**Expansion of Vestas' environmental statement to cover more organisational units** The work to expand the environmental statement to cover more organisational units continues. An action plan has been drawn up for the expansion of the environmental statement and covers all Vestas activities. The target for 2005 is for the environmental statement to cover additional 18 per cent of the organisation.
The environment and occupational health and safety		**The environment and occupational health and safety**
LCA of the V90-3.0 MW wind turbine Vestas has completed a life cycle assessment of a V90-3.0 MW wind turbine. The assessment reveals where the most significant areas of potential environmental impact are located in the individual phases of the turbine life cycle. This assessment can then be used as a decision-making tool in product development, in the choice of production technology, and for performing environmental comparisons between products and technologies.	√	**LCA** Vestas will continue work on the preparation of life cycle assessments for the entire product range. In 2005, a LCA will be prepared for the V82-1.65 MW turbine. The result of the assessments will be used to integrate consideration for environmental and occupational health and safety aspects into the development process and for the preparation of environmental information about Vestas' products.
Minimum standard for turbine sites worldwide Vestas has prepared an internal standard for dealing with quality, environmental and safety aspects in connection with sales projects. The standard is built on the relevant legislation and external standards. A pilot project has been selected to test implementation of the standard.	√	**The phasing out of lead in soldering processes and electronics products** In 2005, an action plan will be adopted for the switch to lead-free components with the result that from 1 July 2006, such components will no longer be used in Vestas' electronic products. For reasons of quality, leaded soldering will continue until the applicability of a lead-free alternative has been sufficiently documented within Vestas' area of use.
The phasing out of lead in soldering processes and electronics In 2004, Vestas finished mapping the use of lead in soldering processes and electronic components. Wind turbines are not covered by the regulations of the RoHS Directive that apply to other products that contain electronic components. Nevertheless, it has been decided that all new designs are to be based on lead-free components, and work has been started on the preparation of an action plan for the switch to lead-free components.	√	**Systematic integration of environmental and occupational health and safety aspects into product development** Vestas will continue to systematise the work to integrate environmental and occupational health and safety aspects into the development of new products. In practice, the evaluation of environmental and occupational health and safety aspects will be implemented further in the Vestas project model for development.
Analysis of industrial injuries at the machining factory in Lem, Denmark The purposes of this completed project were to optimise the registration of injuries and near misses and to improve safety levels. In the concluding questionnaire-based survey, employees stated that the project had contributed to: increased focus on safety, a higher level of information about safety, and better knowledge about safety. However, the project also showed that it is still necessary to work on attitudes to the registration of near misses and the causes of accidents.	√	**Phasing out problematic substances and materials from blade production** Vestas will continue to systematise the work to phase out problematic substances and materials pursuant to Vestas' environmental and occupational health and safety policy and to the company's materials blacklist. Specifically, an action plan will be prepared for phasing out lead and toxic substances from blade production.
Transfer of experience from CAF to overseas blade factories The good results and experience from the CAF occupational health and safety project – of which the aims included reducing the incidence of epoxy allergy among employees at the blades factories in Denmark - are now being transferred to the blade factories in Germany and Italy. A knock-on effect of the project is the substitution in Denmark of a range of products containing epoxy and isocyanate. This substitution has similarly been completed at Vestas' blade factories abroad.	⁄	**Transfer of experience from CAF to overseas blade factories** In 2005, Vestas will complete the transfer of experience from the CAF project, which includes the area of working with epoxy, at the blade factories in Germany, Italy and Great Britain.

Target for sites 2004	Target achieved	Target for sites 2005
Environmental targets In all, Vestas set up 27 environmental targets for 2004. Detailed information about these is included in the descriptions of the individual sites. The extent of the target fulfillment has not been satisfactory.	18	**Environmental targets** In all, Vestas has set up 25 environmental targets for 2005. Detailed information about these is included in the descriptions of the individual sites.
Occupational health and safety targets In all, Vestas set up 22 occupational health and safety targets for 2004. Detailed information about these is included in the descriptions of the individual sites. The extent of the target fulfillment has not been satisfactory.	13	**Occupational health and safety targets** In all, Vestas has set up 39 occupational health and safety targets for 2005. Detailed information about these is included in the descriptions of the individual sites.

Vestas expects India to be one of the markets that will develop most positively in the short term. In 2004, Vestas' deliveries to the Indian market increased by approximately 41 per cent to 241 MW, making India Vestas' largest market outside Europe. The pictures above are from three different projects completed in India and involving NM48-750 kW, NM54-950 kW and NM82-1.65 MW wind turbines.

Figure 6:



The figure presents an overview of the activities that make up the life cycle of a wind turbine from the extraction of raw materials and resources to final disposal.

The environmental impact of a wind turbine from cradle to grave

In 2004, Vestas completed a life cycle assessment (LCA) of a V90-3.0 MW wind turbine. The assessment was carried out on both onshore and offshore models of the turbine.

The life cycle assessment is both a mapping and an evaluation of the potential impact of the wind turbine on the external environment throughout its life time.

The evaluation presents a qualified estimate of where the most significant environmental impacts are positioned within the individual phases of life cycle of the turbine. A life cycle assessment can be used as a decision-making tool in product development, in the choice of production technology, and for performing environmental comparisons between products.

In order to compare two products appropriately, a common basis for comparison is essential. In a life cycle assessment, this is known as the functional unit. For the life cycle evaluation of the V90-3.0 MW wind turbine, the functional unit is 1 kWh of electricity generated. This unit makes it possible to compare the electricity generated by a conventional power station with that generated by a wind turbine.

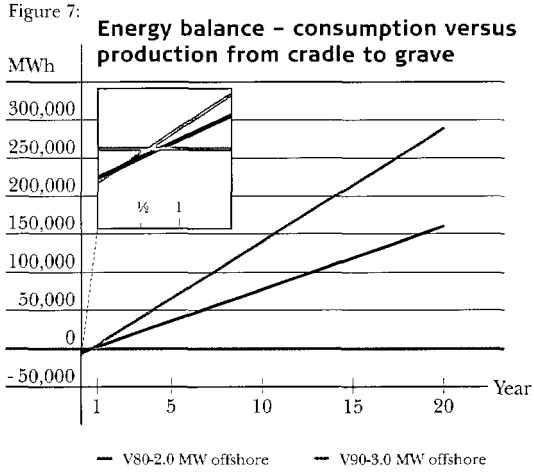
Vestas previously completed a life cycle assessment on a V80-2.0 MW wind turbine, so it is now possible to compare the environmental performance of these two turbine types – and thus establish the results of the development that has taken place from the V80-2.0 MW to the V90-3.0 MW model.

Environmental impact during the life cycle

The life cycle assessment for the V90-3.0 MW turbine is divided into four phases:

- the production phase, which covers the period from obtaining the raw materials to the completion of the wind turbine
- transport of the wind turbine components and erection of the wind turbine

Figure 7:

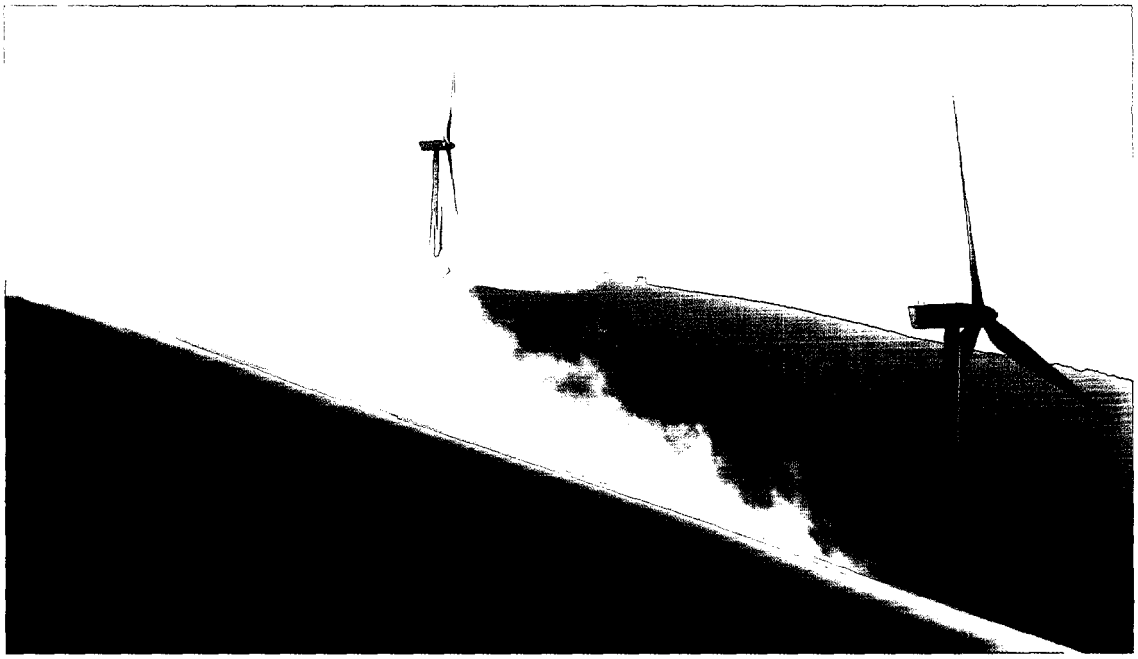


The figure shows the net electricity generation of V90-3.0 MW and V80-2.0 MW offshore wind turbines. It also presents the energy balance and the significance of this balance for the net production of the turbines.

- operation and maintenance throughout the 20-year design lifetime of the wind turbine
- disposal of the wind turbine.

The production phase covers the extraction of the raw materials, production by suppliers and Vestas' own production. This phase includes the most significant incidences of impact on the external environment. The environment is primarily affected by the extraction of iron ore for the production of steel components and by the casting of these components. Epoxy materials used in blade production are made using crude oil, and this is another aspect of the production phase that generates environmental impact. From an environmental perspective, the consumption of iron ore and crude oil involves drawing on limited resources. Therefore, the challenge in this area is to minimise the withdrawal while simultaneously optimising return on these resources, cf. figure 8 on page 99.

Taking the life cycle as a whole, the transport and erection phase is of only minor importance. During this phase, the greatest environmental impact is attributable to energy consumption. This refers primarily to the fuel used to transport components to the erection site and the consumption of fuel by the cranes, for example, during the erection of the wind turbine itself.



The Meroicinha project in Portugal consists of one V90-3.0 MW turbine and three V80-2.0 MW models.

During the operational phase, the environmental impact generated is also minor in relation to the life cycle of the wind turbine as a whole. The impact that is generated here stems from energy consumption in connection with the transport of personnel to and from the wind turbine. This can take the form of fuel for vehicles, boats, helicopters and the like. At the same time, there is some impact connected to service procedures such as oil changes.

The disposal phase covers the dismantling, division and final disposal of the wind turbine. As approximately 80 per cent of a V90-3.0 MW offshore wind turbine on a 80-metre tower can be recycled, this means that the environment is spared the impact of extracting a corresponding volume of new material. This saving is entered as an "asset" in the LCA and results in a considerable reduction in the total environmental impact of the wind turbine, cf. figure 8.

There is also some negative environmental impact linked to the disposal phase, although the scope of this is limited. For example, it has not yet proved possible to identify recycling options for some materials and products. These include various composite materials used, for example, in blades, nacelle cabins and the spinner (which covers the blade hub). However, it is now possible to exploit the energy contained in the composite materials through incineration. At the same time, the cranes, ships and lorries involved in the decommissioning process all consume energy.

Conclusions

One of the most significant conclusions of the Vestas life cycle assessment is that the relationship between consumption of materials for the production of a wind turbine and the energy subsequently generated by the turbine is crucial to the environmental impact of the wind turbine.

Figure 8:

V90-3.0 MW erected:	Offshore	Onshore
Total energy consumption	8,098 MWh	4,311 MWh
Production phase	12,255 MWh	7,795 MWh
Transport and erection phase	477 MWh	74 MWh
Operating phase	117 MWh	14 MWh
Disposal phase	-4,751 MWh	-3,572 MWh

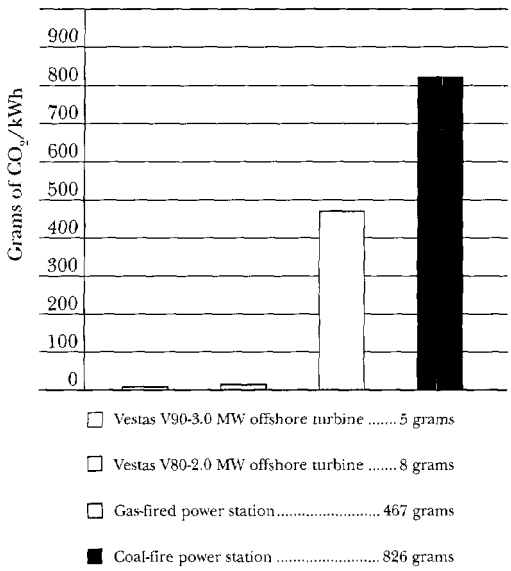
The consumption of energy during the entire life cycle of the V90-3.0 MW turbine divided into the four phases. By way of comparison, the offshore wind turbine is expected to generate 284,600 MWh and the onshore model 157,800 MWh during their 20-year design lifetimes.

In addition, it is clear that work must be done to increase the proportion of the material that can be recycled. The greater the level of recycling, the lower the environmental impact. The weight of a V90-3.0 MW wind turbine has been significantly optimised in relation to that of a V80-2.0 MW. For example, the nacelle and blades are approximately the same weight, while the tower weighs relatively less. At the same time, a V90-3.0 MW wind turbine generates more electricity than a V80-2.0 MW.

In comparison with conventionally generated electricity, it is clear how environmentally superior a wind turbine is when viewed from the perspective of a complete life cycle.

This means that in 20 years, a V90-3.0 MW offshore wind turbine on a good site will generate 284,600 MWh – thus sparing the environment the impact of a net volume of approximately

Figure 9:



Application of a life cycle assessment to compare a Vestas V90-3.0 MW offshore wind turbine with corresponding assessments of a V80-2.0 MW offshore wind turbine, a gas-fired and a coal-fired power station.[3]

233,657 tons of CO_2, as compared to the figures for energy generated by a coal-fired power station, cf. figure 9.

Another important result from the life cycle evaluation is the energy balance, an evaluation of the relationship between the energy consumption of the product and its energy output throughout its life cycle. For a V90-3.0 MW onshore wind turbine, the energy balance is 6.6 months, while the figure for a corresponding offshore wind turbine is 6.8 months. This constitutes an improvement of approximately 2.2 months in relation to the V80-2.0 MW offshore wind turbine, cf. figure 7 on page 98.

The life cycle assessments for the V90-3.0 MW and V80-2.0 MW turbines are published on the Vestas Web site at www.vestas.com under the heading "Environment".

Occupational health and safety

Consideration for occupational health and safety in all phases

Vestas has always focused heavily on the environment and occupational health and safety, so it is only natural that both aspects should be included in a life cycle context.

As early as the initial phases of the development of new turbine models, occupational health and safety aspects are included in connection with the production, transport, installation and service of the turbine as a natural part of the development process. The project groups that work on the development of the wind turbines of the future are composed of representatives of all parts of the organisation. This means that, for example, service technicians and employees from Vestas' production facilities participate actively in the development of the wind turbines. The advantage of this approach is that the experience that the production employees and service technicians have built up in the field of occupational health and safety is integrated into the development of new wind turbines.

The following section describes some of the occupational health and safety activities included in an actual project – the North Hoyle offshore wind farm consisting of 30 V80-2.0 MW wind turbines, which was established in 2004.

Systematic improvement of occupational health and safety

Years ago, the manufacture of blades was a traditional manual craft, but on the basis of years of experience with blade production, Vestas has developed equipment that can handle the most strenuous operations. At the blade factory in Lem, Denmark, the production of the root joints for the blades is fully automated, and a robot has been installed to glue in place the 90 steel pins used in each blade for the V80-2.0 MW turbine.

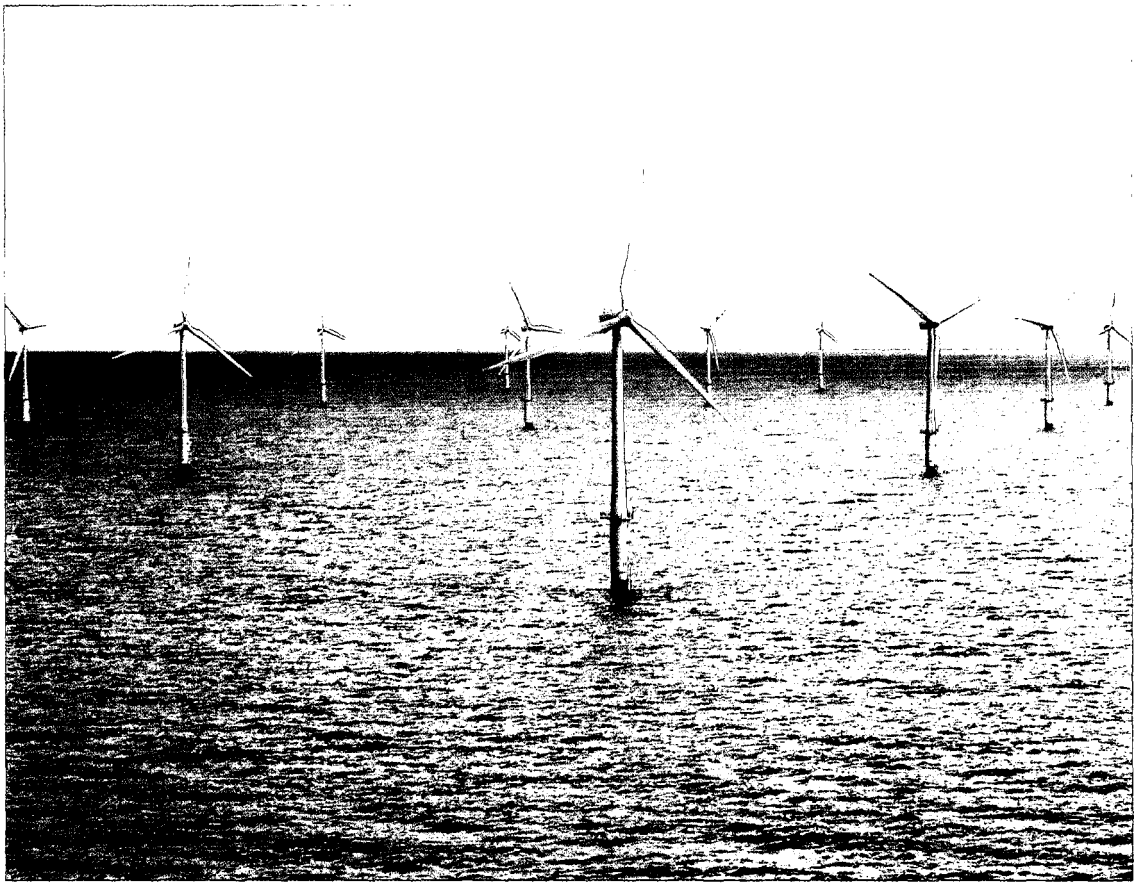
One of the most recent initiatives in the field of occupational health and safety is the introduction of participatory groups, at the factories in Lem and Nakskov, Denmark, in which each member of the group is responsible for areas such as improvements in occupational health and safety, environmental aspects and quality. The introduction of participatory groups is considered to have made a significant contribution to improvements in occupational health and safety. For example drops of 22 per cent from 2003 to 2004 in the incidence of injuries (from 44.2 to 34.3) and drops of 25 per cent in absence due to illness (from 5.1 per cent to 3.8 per cent) during the same period have been recorded at the blade factory in Lem, Denmark.

The transition from conventional stand assembly to line assembly has been initiated at selected nacelle factories. This change means that it is now possible to set up workplaces for more specific assembly tasks, which is expected to improve occupational health and safety conditions. For example of line assembly has made it possible to develop specialist equipment for specific tasks with the result that, for example, heavy manual lifting has been eliminated from a number of operations. In addition, lifts will be installed to raise components to a height that allows employees to carry out their work in an ergonomically correct manner. The concept of introducing line assembly is to be transferred from the nacelle facility in Viborg, Denmark, to other nacelle factories.

Special training programme

As soon as the various turbine components for the North Hoyle offshore wind farm had been manufactured and transported out to the site, it was time to start work on the erection and

[3] *"Global Emission Model for Integrated Systems - version 4.14", published by the Öko-institut (Institute for Applied Ecology), Germany, September 2002.*



The offshore North Hoyle wind farm consisting of 30 V80-2.0 MW turbines has been set up approximately 7 km off the north coast of Wales.

commissioning of the turbines. A great many Vestas employees were involved in this work. Even though the work was carried out away from Vestas' "home turf", the same focus was maintained on occupational health and safety during this phase.

As the erection of wind turbines offshore involves risks other than those associated with the erection of turbines on dry land, Vestas has prepared a special offshore training programme. This programme includes thorough theoretical training and practical training in safety and in the risks involved in erecting wind turbines offshore.

For the erection phase at the North Hoyle site, reporting of near misses was introduced. This means that near misses were recorded and investigated. These records constitute an important tool in the work to eliminate industrial injuries entirely. In order to maintain the desired and necessary focus on safety, information meetings were held regularly with a view to reducing the risk of accidents and injuries. The results for North Hoyle were than during the 713 days that the work lasted, 7 near misses and 2 industrial injuries with absence were reported.

The wide range of activities and initiatives therefore generated good results. Through management systems, a high level of systematisation is applied to the work on occupational health and safety. In addition, a great emphasis was placed on training employees at all levels.

Major focus on safety

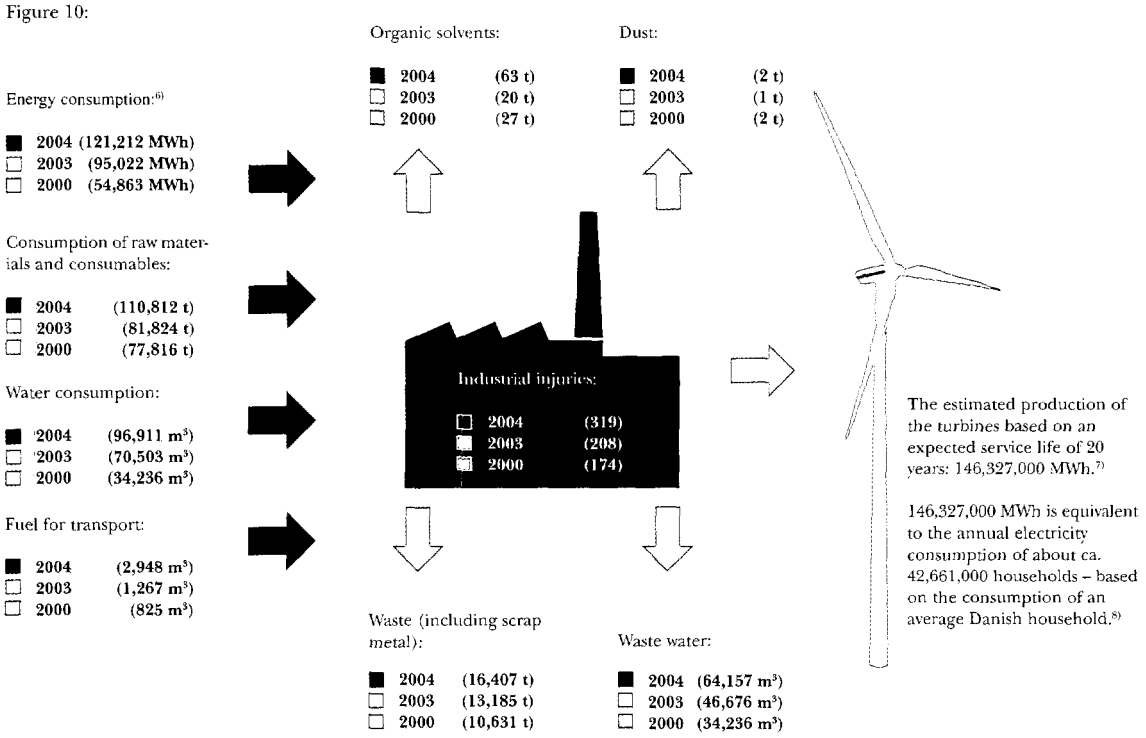
Vestas' attitude is that industrial injuries are not acceptable and generate unease among employees. Even though the project at North Hoyle shows that Vestas has made great progress in the field of occupational health and safety, the company will continue to focus heavily on this area in the future.

The work to implement management systems throughout the Group will continue. At the same time, one of the stated aims is to improve dialogue with customers, authorities, shareholders and employees with regard to the expectations the various stakeholders have for Vestas. Only through dialogue can Vestas remain in the vanguard of development and thus ensure that existing and future turbines are developed, manufactured, transported, erected and serviced in accordance with the applicable requirements for occupational health and safety.

Input/output 2004

The figures below illustrate the overall input and output for the sites included in the 2004 environmental statement. The output is shown as the total energy production of the turbines delivered during their expected service life of 20 years. Detailed data about the sites are published online at www.vestas.com – under the heading "Environment". They are also available as hard copy data sheets.

Figure 10:



Indirect impact

Production processes at Vestas produce some indirect environmental impact. The table below lists the most important types of impact and explains the effects these can cause. It also details the positive effects wind turbines help to generate.

Indirect impact	Type of impact
Emission – Consumption of energy, diesel oil and organic solvents results in emissions, primarily of CO_2, SO_2 and VOC. Emissions from suppliers of raw materials likewise contribute to indirect impact.	These emissions primarily contribute to the greenhouse effect (CO_2 and VOC) and to acid rain (SO_2).
Waste – Results from the manufacture of wind turbines and the activities of suppliers.	The generation of high-volume waste takes up landscape resources as a result of landfill. Hazardous waste is waste that must receive special treatment.
Waste water – Waste water from Vestas sites is primarily sanitary waste water. Emissions from suppliers in the product chain are similarly considered an indirect impact.	Emissions of waste water cause nutrient salt load and ecotoxicity, for example.
Sustainable energy – On the positive side, wind turbines generate sustainable energy for customers throughout the world. The wind turbines manufactured thus contribute to reducing impact and load stemming from conventional sources of energy such as coal-fired power. The environmental advantages far outweigh the effects arising from both direct and indirect environmental impact.[9]	Efficient and competitive options to conventional energy production will help to reduce emissions that contribute to the greenhouse effect and acid rain. In addition, sustainable energy will help to reduce the creation of radioactive waste from the production of electricity.

[6] *Of this, sustainable energy accounts for 52 per cent.*

[7] *The value is calculated on the basis of an expected service life of 20 years and a capacity factor of 30 per cent. The figure should be considered only indicative, as it stems from a calculation based on an estimate.*

[8] *In "Energistatistik 2003" (Energy Statistics 2003), published by the Danish Energy Authority, electricity consumption – excluding electricity for heating – for a standard Danish household is estimated at 3,430 kWh per year.*

[9] *Life cycle assessment carried out by Vestas in 2004. Explanatory comments on the life cycle assessment are listed in the report "Life cycle assessment of offshore and onshore wind power plants based on Vestas V90-3.0 MW turbines", March 2005.*

Development in relation to 2003

The 2004 Environmental Statement has been extended to cover an additional five sites. As a result, the total volumes stated and the number of industrial injuries have increased. The five new sites are Vestas Blades in Lauchhammer, Germany; Vestas Central Europe in Husum, Germany; Vestas Nacelles in Galicia, Spain; Vestas Nacelles in Wynyard, Australia; and Vestas Nacelles and Vestas Towers in Campbeltown, Scotland. The specific environmental and occupational health and safety data for these sites are listed in the appropriate site descriptions. Site descriptions can be found at www.vestas.com under the heading "Environment".

Consumption of raw materials rose in 2004. In addition to the inclusion of, in particular, the blade factory in Lauchhammer, Germany and the tower factory in Campbeltown, Scotland – which both run traditionally resource-intensive processes – the rise is attributable to an increase in steel consumption at the tower factory in Varde, Denmark. This rise in steel consumption stems from an increase in tower manufacture and from the fact that the average weight of the towers has risen.

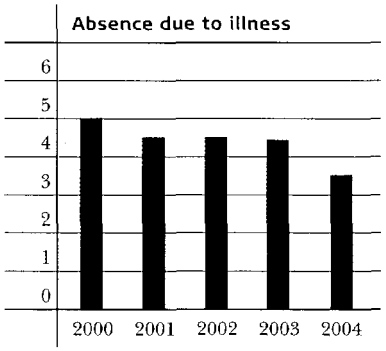
Total energy consumption rose in 2004. This is due to the inclusion of the blade factory in Lauchhammer, Germany in particular, as this facility operates energy-intensive processes. To a lesser extent, it is also due to the inclusion of the nacelle and tower factory in Campbeltown, Scotland and the sales and service unit in Husum, Germany. However, a comparison of the energy consumption of the sites included in the 2003 report with their consumption in 2004 shows that their total energy consumption has actually fallen by 6 per cent. This drop stems primarily from the site in Videbæk, Denmark, the nacelle factory in Viborg, Denmark, and the blade factory in Nakskov, Denmark. The Videbæk site succeeded in making considerable energy savings by optimising its CTS installation. This involved, for example, lowering the temperature at weekends, when no work is done in the production department. The fall achieved at the Viborg site is similarly attributable to optimisation of the CTS installation. The lower figures for the Nakskov site are due to the fact that production here was lower in 2004 than in 2003.

Fuel consumption has increased by 132 per cent. This is primarily attributable to the inclusion of the sales and service unit in Husum, Germany, which is currently the largest unit of its kind in the Vestas Group.

Inclusion of the tower factory in Campbeltown, Scotland has contributed to an increase in the emission of organic solvents and dust from 2003 to 2004. At this site, organic solvents are released during the surface treatment of towers.

The total incidence of industrial injuries rose in 2004 compared to 2003. Vestas Mediterranean East, Vestas Blades and Vestas Nacelles in Taranto, Italy, constituted the principal source of this rise, as they experienced 42 more industrial injuries in 2004 than in 2003 – an increase of 87 per cent. At the Vestas Northern Europe facility in Videbæk, Denmark, the number of industrial injuries rose by 19 in relation to 2003 – a 49 per cent increase. However, a number of sites have succeeded in reducing the incidence of industrial injuries locally. For example, the blade factories in Lem and Nakskov, Denmark, introduced a project entitled "zero injuries, zero errors, zero waste" and implemented participatory groups. These initiatives generated positive results in that the total number of industrial injuries was cut by 30 – a reduction in the total incidence of 39 per cent. Overall, the development in 2004 is not satisfactory, and Vestas will continue to focus clearly on systematic occupational health and safety management. For example, the Group is currently working on a project for the global exchange of experience in the field of safety.

Figure 11:



Development in absence due to illness among blue-collared employees.

Absence due to illness among salaried employees fell markedly in 2004, which is a very positive development. This positive trend is attributable to the systematic work on occupational health and safety management in the long term, which is reflected in the development in the rate of absenteeism due to illness, cf. figure 11. At the blade factories in Denmark, the introduction of the project entitled "zero injuries, zero errors, zero waste" and the implementation of participatory groups have had a significant effect. Absence due to illness in Nakskov, Denmark, has fallen by 46 per cent, from 6.7 per cent in 2003 to 3.6 per cent in 2004, while the figures for Lem, Denmark, for the same period show a 25 per cent drop, from 5.1 per cent to 3.8 per cent.

Data statement 2004

The statements below present the most significant enviromental and occupational health and safety data that are systematically collected by Vestas Wind Systems A/S.

Environment	Total 2003	Total 2004 Previously included sites[1]	Total 2004
Raw materials and consumables (t)	**81,824**	**95,437**	**110,812**
· Metals	66,093	80,164	90,732
· Oil products	961	913	1,274
· Composite materials	14,157	13,559	17,589
· Other products	613	801	1,217
Energy (MWh)	**95,022**	**89,042**	**121,212**
· Electricity	50,389	51,860	68,856[2]
· Gas	13,413	10,791	12,058
· District heating	30,837	26,232	36,104
· Oil	383	159	4,194
Fuel (m^3)	**1,267**	**1,213**	**2,948**
Water (m^3)	**70,503**	**79,697**	**96,911**
Waste and scrap (t)	**13,185**	**13,446**	**16,407**
· Combustion	3,189	2,980	4,301
· Landfill	2,512	2,192	2,827
· Recycling	7,484	8,274	9,279
Waste water (m^3)	**46,676**	**46,943**	**64,157**
Emissions of dust (t)	**1**	**1**	**2**
Emissions of organic solvents (t)	**20**	**36**	**63**
Volume of flue gasses (normal 1,000 m^3)[3]	**12,048**	**9,741**	**15,789**
Neighbour complaints (number)	**0**	**2**	**2**
Breaches of internal inspection conditions[4]	**1**	**1**	**1**
Environmental accidents (number)	**0**	**3**	**5**

Occupational health and safety	Industry figures[5]	Total 2003	Total 2004 Previously included sites[1]	Total 2004
Injuries (number)[6]	**N/A**	**208**	**218**	**319**
Incidence of injuries[7]	**43.8**	**39.3**	**43.3**	**42.5**
Absence due to injuries[8]	**3.7**	**4.8**	**4.3**	**3.8**
Absence due to illness, blue-collar workers (%)	**4.2**	**4.4**	**3.7**	**3.5**
Absence due to illness, white-collar workers (%)	**1.9**	**1.4**	**1.5**	**1.6**

[1] *"Previous sites" refers to the sites that were included in the Environmental Statement for 2003.*

[2] *Of this, sustainable energy accounts for 52 per cent.*

[3] *Flue gases stem from gas and oil-fired boilers that are principally used to heat buildings.*

[4] *Details of breaches of own control conditions and the associated corrective actions are listed under the descriptions of the individual sites.*

[5] *The sector figures apply to the iron and metal goods industry and are drawn from reports prepared by the Confederation of Danish Employers for 2003.*

[6] *The figures refer to industrial injuries that result in an absence of more than one day in addition to the day on which the incident occurred.*

[7] *The incidence of injuries is defined as the number of industrial injuries per 1,000,000 working hours.*

[8] *The incidence of absence due to injury is defined as the number of hours lost to absence due to industrial injuries per 1,000 working hours.*

Accounting policies

Accounting policies and measurement and statement methods applied are unchanged from 2003, except for waste and scrap, where the precision of the methods for measurement and accounting has been increased through the inclusion of new sites. Adjustments made to comparative data are disclosed in notes if they have influence on the achievement of targets or involve a significant change of the total environmental impact.

Raw materials and consumables
Raw materials are recognised in the statement on the basis of consumption drawings from stocks to manufacturing in the first phase of manufacture and to servicing of wind turbines, respectively, as recorded in the company's ordinary registration systems.

Consumables are recognised in the statement on the basis of supplier statements and own lists, respectively, of quantities delivered in the financial year collected decentrally per site.

Relevance has been determined on the basis of approvals by the authorities followed by a selection in relation to material quantities consumed compared with the activities carried out on the sites.

Energy and water consumption
Electricity, gas, district heating and water are recognised in the statement on the basis of quantities consumed according to direct meter readings per site with related administration.

The consumption of electricity comprises both electricity purchased externally and consumption of production from own wind turbines.

Oil for heating is recognised in the statement on the basis of external purchases adjusted for stocks at the beginning and at the end of the period. Fuel for transport has been recognised on the basis of supplier statements.

Waste and scrap
Waste is recognised in the statement on the basis of weight slips received from the waste recipients for deliveries effected in the financial period, apart from a few types of waste and not significant amounts of waste, which are estimated on the basis of subscription arrangement and load. Scrap is recognised in the statement on the basis of weight slips from the scrap dealers collected decentrally per site.

Emission to air and waste water
Emissions of organic solvents have been calculated on the basis of quantities of mould preparation agents, coating materials and acetone purchased as well as information from suppliers concerning evaporation during use in processes.

Emission of dust is based on the discharge determined by the authorities which is to be included in the total dust emission calculations, estimated operating times of the individual plants and measurements or information from the suppliers as regards dimensions and filter efficiency.

Waste water is recognised as water consumption reduced by utilised water, which does not end as waste water e.g. water humidification, green areas or other processes where the consumption is documented through measurement.

Materiality is determined on the basis of regulatory approvals and conditions.

The total volume of flue gases from incineration processes has been calculated based on the consumption of fuel oil and natural gas as well as measured or estimated oxygen percentage.

Neighbour complaints
Neighbour complaints are recognised in the statement as the number of complaints received resulting in operating or layout changes.

Internal inspection conditions exceeded
Internal inspection conditions exceeded are recognised in the statement as the conditions for which there is a measurement requirement and the measurement has shown the conditions being exceeded.

Environmental accidents
Environmental accidents are recognised in the statement as the accidents occurred which should be or have been reported to the authorities.

Occupational health and safety
Occupational health and safety are recognised for all activities under the organisational structure.

Industrial injuries are recognised in the statement on the basis of records of injuries resulting in more than one day of absence in addition to the day on which the injury has happened.

Absence due to injuries is defined as hours absent due to industrial injuries. The number of working hours and absence frequency due to injuries have been calculated on the basis of daily time cards registered in the payroll system.

Absence due to illness is defined as hours absent due to illness, exclusive of absence caused by industrial accidents, maternity leave and child's first day of illness. Absence frequency due to illness has been calculated by means of registrations in the payroll system based on daily time cards (blue-collar workers) and absence records (white-collar workers), respectively.

Auditors' Report to the Shareholders and Other Stakeholders of Vestas Wind Systems A/S

We have performed an assessment of Vestas Wind Systems A/S' Environmental Statement for 2004, which comprises the pages 92-105.

Criteria for the Preparation of the Environmental Statement

On page 93 of the Environmental Statement, Management describes the sites comprised by the Environmental Statement for 2004.

On page 93 of the Environmental Statement, under the heading "Objectives", Management states the reasons for its choice of waste, energy, absence due to illness, industrial injuries and environmental improvements of the product as suited criteria for describing the Company's environmental and occupational health and safety aspects.

Environmental and occupational health and safety data are incorporated in the Environmental Statement according to the accounting policies and measurement and computation methods stated on page 105.

Responsibilities

Company Management is responsible for the preparation of the Environmental Statement, including the establishment of recording and internal control systems to ensure a reliable reporting basis, for the determination of acceptable reporting criteria and choice of data to be collected.

Our responsibility is to express an opinion on the Environmental Statement based on our assessment.

Basis of Opinion

We planned and performed our work in accordance with the International Standard on Assurance Engagements, ISAE 3000, to obtain reasonable assurance that the data stated on pages 92-105 of the Environmental Statement for 2004 in respect of the activities of the sites comprised have been prepared in accordance with the above criteria for the preparation of the Environmental Statement.

Based on an assessment of materiality and risk, our work included accounting analyses, inquiries, testing of systems, data and underlying documentation, including verification of compliance with the guidelines stated for measurement and computation of data. Furthermore, we assessed the propriety of the internal recording and reporting systems as basis for uniform recording of and reporting on environmental and occupational health and safety data for the sites comprised.

Opinion

In our opinion, the data stated on pages 92-105 of the Environmental Statement for 2004 have been prepared in accordance with the above criteria.

Herning, 30 March 2005

PricewaterhouseCoopers
Statsautoriseret Revisionsinteressentskab

Niels Jørgen Lodahl
State Authorised Public Accountant

Birgitte Mogensen
State Authorised Public Accountant

Conversion factors

1 GW	1,000 MW
1 MWh	1,000 kWh
1 Nm^3 natural gas	11 kWh
1 litre heating oil	9.89 kWh
1 ton	1,000 kg

Glossary

Absentee rate:
The absentee rate is defined as the number of absentee hours per 100 working hours.

Capacity factor:
An expression for the number of hours that the turbine operates at full capacity during a year.

CNC processing:
CNC (Computer Numerical Control). An expression used for computer-controlled processing.

Consumables:
Chemicals and materials which are used in the production process.

Design service life:
The design service life has been set at 20 years.

Energy balance:
The energy balance of a wind turbine is an expression of how long the turbine has to operate before it has produced sufficient energy to cover the volume of energy consumed in its entire life cycle, from extraction of the raw materials to final disposal.

Environmental improvements of the product:
In the context of wind power, environmental improvements mean more efficient wind turbines and environmental evaluation of the substances and materials used in the product.

Epoxy:
Epoxy is a thermosetting plastic available in a wide range of forms. Typically, epoxy consists of several components in liquid form which, having been blended with a hardening agent, become a solid plastic. The hardening process typically involves the application of heat.

Estimated turbine production:
The value is calculated on the basis of an expected service life of 20 years and a capacity factor of 30 per cent. The figure should be considered only indicative, as it stems from a calculation based on an estimate.

Flue gas:
Combustion gas from gas and oil-fired installations.

GAP analysis:
Identification of the difference (the gap) between the current practice in the fields of the environment and occupational health and safety and Vestas' internal requirements.

Internal inspection conditions:
Conditions laid down by the supervisory authority for the measurement of noise, odours, waste water and emissions into the air.

ISO 9001:
International standard for quality management systems.

ISO 14001:
International standard for environmental management.

ISO 14040-43:
International standard for environmental management, Life Cycle assessment.

LCA:
An LCA (Life Cycle Assessment) is a report on the environmental impact generated by a specific product throughout its lifetime (the cradle to grave principle). Life Cycle Assessments are carried out on the basis of the UMIP method (Udvikling af Miljøvenlige IndustriProdukter – Development of Environmentally Friendly Industrial Products), which, in turn, is based on ISO 14040-43.
At Vestas, LCAs are used as a work method for the environmental improvement of the products.

Material blacklist:
A list of substances and materials that may not be used in Vestas' products, as well as substances and materials that may only be used to a limited extent.

Mould preparation agents:
Umbrella term for the following groups of auxiliary agents: mould cleaning agents, mould sealants and release agents.

Nacelle:
The turbine housing at the top of the tower.

Near miss:
An incident that occurs unexpectedly, which does not result in personal injury, but may have caused material damage and could conceivably have led to personal injury.

OHSAS 18001:
Standard for Occupational Health and Safety management (OHSAS = Occupational Health & Safety Assessment Series).

Prepreg:
Epoxy laminate consisting of fibreglass weave impregnated with epoxy. The product is subsequently hardened and therefore takes the form of a dry material.

Root joint:
The "root" end of the blade (made of prepreg).

Safety audit:
Systematic examination of a department or machine with the purpose of constantly checking for and repairing any errors and defects that may affect safety.

Sanitary waste water:
Waste water from baths, kitchen use, ordinary cleaning, etc.

Spar:
Blade component that determines the strength and rigidity of the blade (made of prepreg).

Sustainable energy:
CO_2-neutral energy generated from the combustion of biomass in the form of wood, straw and biogas, refuse incineration, wind power, heat pumps, solar power installations and geothermic heat.

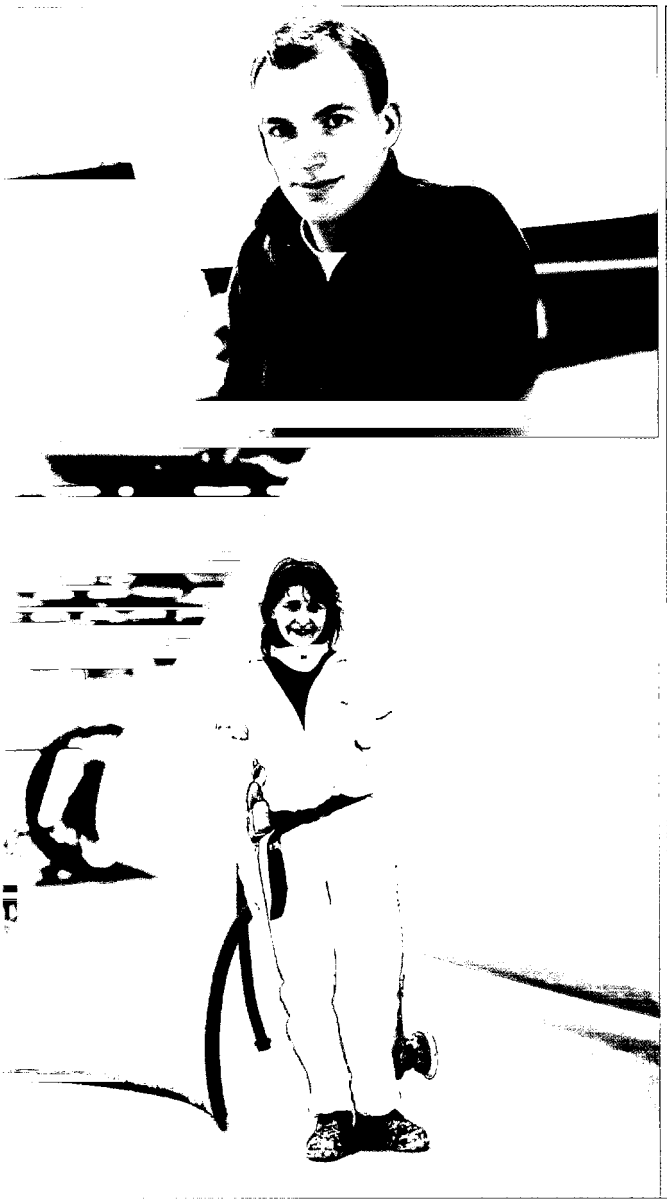
Unwanted substances and materials:
Substances and materials covered by "Effektlisten 2000" (Effect List 2000) – guideline No. 6/2000 from the Danish Environmental Protection Agency and "Listen over uønskede stoffer" (List of unwanted substances) – guideline No. 9/2000 from the Danish Environmental Protection Agency, as well as substances and materials that Vestas unilaterally wishes to stop using on account of their potential impact on the environment and/or occupational health and safety.

VOC:
VOC (Volatile Organic Compounds). Term for organic solvents.

Constant focus on safety, the environment and occupational health and safety

The environment and occupational health and safety – including employee safety – have a considerable influence on Vestas' business development and operations. As such, regard for the environment and occupational health and safety is deeply rooted in the Vestas organisation. In addition to supplying wind power systems for the generation of sustainable energy, Vestas considers it natural to include consideration for the environment and occupational health and safety in all its operations and development activities.

Vestas has always given high priority to safety at work, and over the years has made a concerted effort to improve safety in all aspects of its employees' everyday work situations. One of the tools used to improve safety and prevent industrial injury is the registration of both industrial injuries and near misses. The registered incidents provide the basis for corrective actions intended to prevent industrial injuries.



Head office

Vestas Wind Systems A/S
Alsvej 21
8900 Randers
Denmark

Tel. +45 97 30 00 00
Fax +45 97 30 00 01

vestas@vestas.com
www.vestas.com

Sales units

Vestas Northern Europe
Herningvej 5 - 7
6920 Videbæk
Denmark

Tel. +45 97 30 00 00
Fax +45 97 30 22 73

vestas-northerneurope@vestas.com
www.vestas.com

Vestas Central Europe
Otto-Hahn-Str. 2 - 4
25813 Husum
Germany

Tel. +49 4841 971 0
Fax +49 4841 971 360

vestas-centraleurope@vestas.com
www.vestas.com

Vestas Mediterranean West
Can Rabia, 3-5. Edificio B 4ª planta.
Sarrià Forum
08017 Barcelona
Spain

Tel. +34 902 41 98 00
Fax +34 932 41 40 80

vestas-mediterraneanwest@vestas.com
www.vestas.com

Vestas Mediterranean East
Via Ariosto 12
Zona Industriale
74100 Taranto
Italy

Tel. +39 099 4606 111
Fax +39 099 4606 301

vestas-mediterraneaneast@vestas.com
www.vestas.com

Vestas Asia Pacific
Smed Sørensens Vej 1
6950 Ringkøbing
Denmark

Tel. +45 97 30 00 00
Fax +45 97 30 62 50

vestas-asiapacific@vestas.com
www.vestas.com

Vestas Americas
111 SW Columbia Street
Suite 480
Portland, OR 97201
USA

Tel. +1 503 327 2000
Fax +1 503 327 2001

vestas-americas@vestas.com
www.vestas.com

Production units

Vestas Nacelles
Smed Sørensens Vej 3
6950 Ringkøbing
Denmark

Tel. +45 97 30 00 00
Fax +45 97 30 65 67

vestas-nacelles@vestas.com
www.vestas.com

Vestas Control Systems
Frankrigsvej 15
8450 Hammel
Denmark

Tel. +45 97 30 86 00
Fax +45 97 30 86 01

vestas-controlsystems@vestas.com
www.vestas.com

Vestas Blades
Smed Hansens Vej 19
6940 Lem
Denmark

Tel. +45 97 30 00 00
Fax +45 97 30 66 23

vestas-blades@vestas.com
www.vestas.com

Vestas Towers
Alsvej 21
8900 Randers
Denmark

Tel. +45 97 30 00 00
Fax +45 97 30 56 10

vestas-towers@vestas.com
www.vestas.com