



# A sustainable business on a sustainable planet

UN Global Compact  
Communication on  
Progress 2014  
GRI G4 Report

[lmwindpower.com](http://lmwindpower.com)

**LM** WIND  
POWER

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This is the second LM Wind Power GRI G4 report submitted as our Communication on Progress to the UN Global Compact. The most recent report covering 2012-2013 was published July 11, 2014, a few months delayed compared to the initial intention of publishing with the annual report in March. It is still the aim to combine the sustainability reporting with the financial

reporting, having an annual reporting cycle following the publication of the financial results. This report has been reviewed by an external sustainability expert previously with the GRI per our request. We will continue to seek external assurance on report quality and formalities as a means to continuously improve.

# The long term recipe for a sustainable business

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LM Wind Power is arguably one of the ‘greenest’ businesses in the world. We have manufactured and supplied nearly a quarter of the global wind turbine blade fleet flying worldwide. Every year they help produce green electricity which together mitigates over 120 million tons of CO<sub>2</sub> in the atmosphere. That’s equivalent to almost twice the national emissions of our home country, Denmark, for example.

For around 95% of our product’s lifespan, it is making a positive contribution to reducing carbon emissions from energy production which are regarded as a major contributor to global climate change. However, for perhaps 5% of our products total life span – during sourcing of materials and our manufacturing processes – we do have a less positive environmental impact which we want to reduce. This report indicates some of the processes in place to achieve those goals. Together with the industry we are also pioneering new, viable end of life solutions for expired blades.

**“The absolute necessity of developing new, sustainable approaches to the way the world generates its growing energy needs is greater than ever”**

Climate change, environmental pollution and resource scarcity, combined with increased wealth in developing countries and a rapidly growing global population, are influencing the roles and decisions of governments and businesses everywhere. Our industry is directly affected by these macro trends, which are addressed with varying force depending on the political will and sense of urgency in the regions in which we operate. Debates on targets for CO<sub>2</sub> emission reductions and renewable energy generation as well as various incentive schemes influence our business prospects. Government indecision or failure to stick to commitments on CO<sub>2</sub> mitigation targets sometimes create volatile operating conditions for the wind industry. It’s a challenge that can make it difficult to reap the benefits of long term planning. But we are adapting, and have responded by continuously driving down the cost of wind energy through our industry-leading technology and innovative use of materials and smarter, more flexible and efficient manufacturing methods. Pioneering wind turbine blade technology through clever engineering and innovation, a culture of continuous improvement and increased flexibility in our business model remain core to our strategy – short, medium and long term. Together these three factors have ensured the company has survived to be the leading,

global independent supplier to the wind industry helping our customers and wind energy to become even more compelling.

In LM Wind Power, along with our customers, we share a fundamental belief that the industry needs to be able to stand on its own feet without subsidies and we will continue contributing to driving down the cost of energy. Wind energy is already the most viable and cost efficient form of renewable electricity generation, an increasingly important contributor in the diverse energy mix required to power the future.

Over the years, we have developed a strong voice in the public debate around wind energy, garnering support and setting out the facts. One example is in the US, where the uncertainty around the Production Tax Credit (PTC) continues to pose a challenge to the industry. We initiate dialogue with representatives across the energy policy debate and engage anyone who is willing to listen on the importance and benefits of strong support for wind. The same applies in many other areas where we operate, most notably in Canada and India, always in close alignment with industry and local government bodies. Our efforts are appreciated by our customers, authorities and other industry stakeholders and the message seems all the more compelling as the visible effects of climate change increase.

It is clear that LM Wind Power’s biggest contribution to a cleaner world lies in our product and its reliable service to our customers, increasing Annual Energy Production (AEP) from each rotor set and reducing the cost. Our blades produce green energy every day, enabling millions of people and businesses to be more sustainable and offering part of the solution to some of the world’s most pressing challenges. At the same time, we create long-term, skilled employment, including a substantial training effort for local unskilled employees, and encourage economic growth. However, this activity comes with a footprint, most notably through the health and safety of our global workforce and our impact on the environment, due to, for example, our material supply and energy consumption, waste and transportation activity. In addition, labor rights in every market, anti-corruption and ethical business conduct are important areas of focus for us just as they are in other global manufacturing businesses with international suppliers and customers around the world.

Since we signed the UN Global Compact in 2010 and began our collaboration with the Global Reporting Initiative (GRI), our sustainability targets have become fully integrated into our daily operations. They contribute to our vision and our commitment increases with each passing year. In the next phase of our journey we will be proposing bolder, more demanding

targets, as we aim to improve within each of our sustainability focus areas - Safety, Environment, Technology and People. Our goal is to raise the bar continuously as the company matures and as further material issues emerge in line with business growth.

I am very pleased to say that we already have high standards and practices in place and that our workforce is continuously expanding their interest and dedication to ensuring sustainability thinking is further integrated into the business.

Nonetheless we faced some significant challenges in 2014 related to our core material, ramping up in new markets and ensuring the efficient implementation of new technology.

One example occurred due to a fire at a key supplier. We couldn't secure enough fiberglass material, making it very difficult to sustain production levels and meet demand. The solution was not ideal, from either a financial or a sustainability perspective. We had to air freight material from other suppliers to our locations, significantly adding to the cost and carbon footprint of the product. This unfortunate situation, as well as a general shortage of key material for wind industry components, further confirmed that we need to step up on research and development activities to ensure viable alternatives to core material commodities. This needs to happen, not only to secure supply but also to ensure more sustainable material components. Increasingly as the global wind turbine blade fleet ages, we are taking disposal at the end of the product's life into consideration. Among other things, we are looking at various foam types to replace balsa wood, which grows in very few locations and under specific conditions and we are gradually replacing the PVC in some of the blade components with PET from recycled plastic bottles.

**“There are so many opportunities for the business right now; the challenge will be to capture them all”**

The material shortage affected our Joint Venture operations in Brazil in particular, adding to the difficulties of ensuring the required performance there. The challenging start-up in Brazil has highlighted the importance of a strong focus on people and culture, not least in a new location with little or no experience in blade production. In light of our experiences in Brazil, we have again reviewed our processes for new market entries and targeted efforts have been put in place to strengthen the team and build a strong values-based culture.

#### **Reflecting on performance and a look to the future**

Looking at our sustainability metrics, in particular our health, safety and environmental performance, we are clearly moving in the right direction. We are reducing our energy consumption despite ramping up production; we have driven down our Lost

Time Accident (LTA) rate to the lowest level ever; we have introduced several new developments that reduce the cost of energy while eliminating harmful chemicals or materials in our manufacturing, and we are reducing waste, improving HSE, and saving cost through the implementation of thousands of good ideas generated every year by our own employees all over the world.

We operate in a highly dynamic business, in which one of the challenges is to balance ambitions with a realistic assessment of what can reasonably be achieved. Our approach is pragmatic, straightforward and humble. We do not have the resources and capacity to initiate huge sustainability programs that require big short term investments. but we are determined to continue our progress, making LM Wind Power the most sustainable business it can be.

We still have work to do to reduce the carbon footprint of our operations and to engage more with customers and suppliers on mitigating social and environmental impacts, looking at the full life cycle of our product and activities. In the short term, we will continue to focus hard on the areas in which we have a direct impact - introducing longer, more efficient blades that increase Annual Energy Production (AEP) and lower Levelized Cost of Energy (LCoE), energy consumption, waste reduction and health and safety within our own operations - while further intensifying the dialogue with our many stakeholders. There are so many opportunities for the business right now; the challenge will be to capture them all. We need to add as many GigaWatts (GW) of clean energy provided by LM Wind Power blades as possible at cost levels closer to, or below other sources of electricity supply, and in a profitable way. For me, that is our long term recipe for a sustainable business.



**Marc de Jong**  
**Chief Executive Officer**

# About this report



This annual Communication on Progress (COP), based on the GRI G4 Guidelines, covers the calendar year 2014. It provides a more in-depth presentation of sustainability performance, supplementing the non-financial highlights included in the LM Wind Power Annual Report published earlier this year, which is available at [2014report.lmwindpower.com](http://2014report.lmwindpower.com).

This is the second LM Wind Power COP applying the G4 framework. The report for 2012-2013 was published July 11, 2014. As G4 pioneers, we have had to get to know the framework and decide on the level of detail, balancing the potential to report in a meaningful way and our practical ability to obtain the required data and information. Like every other G4 pioneer company, we have embarked on a learning process that we will continue to refine and challenge, participating in the development of standards along with peers and other more advanced companies.

The most notable difference compared to our previous GRI G4 report is the omission of data from Svendborg Brakes, which we disposed of late in 2013. Since they contributed to the group's result for most of 2013, they were included in the 2013 COP. Data for Brazil has been included in all categories except no. of employees due to a low level of validity of data.

This report has been approved by LM Wind Power's Sustainability Board members which comprises a select group of the company's senior management: the Vice President (VP) for Communications & Human Resources; the VP, Operations; VP, Quality and Health Safety & Environment (HSE); and the Chief Executive Officer (CEO). We also collaborate with expert external help including the Head of Sustainability at the company's owners, Doughty Hanson & Co. Managers Ltd. in London. For this year's report we have worked closely with GRI members past and present and participated in networks and formal meetings. We refer to the LM Wind Power Annual Report 2014 for some of the data and information. This was approved by the Supervisory Board at the time of publication.

The report is prepared in accordance with the guidelines at Core level. The GRI Content Index can be found on page 46.

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Organizational  
Stakeholder  
LM Wind Power

2015

# Organization profile

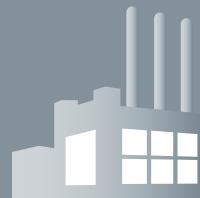
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## IN 2014

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In 2014, LM Wind Power provided the development, manufacturing, transportation and service of wind turbine blades to wind turbine manufacturers worldwide. The company's headquarters are located in Kolding, Denmark and it has a global business office in Amsterdam, The Netherlands. Its global manufacturing footprint includes 13 factories located on four continents, in eight countries, Denmark, Spain, Poland, Canada, USA, India, China and Brazil, in or close to all key markets for wind power to better serve our customers. The service department supports wind farm operators all over the world, among them large utilities and conglomerates.



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**13** Blade factories

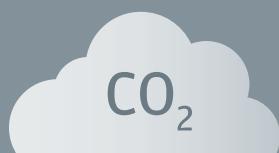


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**4,505** People worldwide

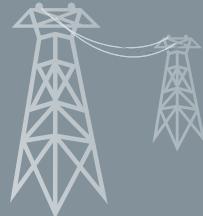
# Organization profile

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**120** Million tons  
of CO<sub>2</sub> mitigated



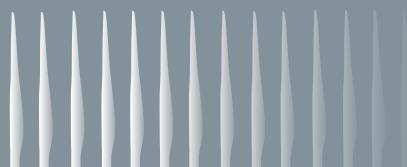
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**70 GW** Installed  
capacity



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**1/4** Turbines in the world  
have LM Wind Power blades



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**8,262** Blades  
produced  
in 2014

## OWNERSHIP

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The principal shareholders of LM Wind Power are the partnerships managed by Doughty Hanson & Co. Managers Ltd, a company incorporated in England and Wales and headquartered in London. Doughty Hanson is a leading pan-European private equity investor, with offices in London, Paris, Stockholm, Frankfurt, Milan and Madrid. The firm has made 63 investments since 1985 with an aggregate value of more than EUR 27 billion.

For total revenue and breakdown, please see the latest annual report available on page 40.

## FACTS

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LM Wind Power produced 8,262 blades in 2014, which contributes to a total of more than 175,000 blades since we began blade operations in 1978. This corresponds to approximately 70 GW of installed wind power capacity which each year effectively replaces approximately 120 million tons of CO<sub>2</sub>. Almost one in four turbines in the world have LM Wind Power blades.

LM Group Holding A/S (LM Wind Power) is a limited company based in Denmark. The Consolidated Financial Statements for 1 January – 31 December 2014 includes the consolidated financial statements for LM Group Holding A/S and its subsidiaries (the Group).

The full Group structure is available on page 65 in the 2014 annual report.

# Sustainability organization and interfaces

LM Wind Power works in a two-tier management structure. The first tier is the Supervisory Board, which is the highest governance body for the whole company. It includes three members who represent our owners, Doughty Hanson, and two employee representatives. The Supervisory Board provides the strategic direction, exercises control over Executive Management, and ensures high level financial viability. The second tier is Executive Management, also referred to as LM Wind Power's Management Team. They are responsible for the daily management of the business, including execution of decisions made by the Supervisory Board. In addition to this two-tier management system, there is an independent Advisory Board in place comprising two former Management Team colleagues, which can act as a sounding and review board to both the Management Team and the Supervisory Board.

These bodies are responsible for any decisions with economic, environmental or social impacts. However, the practical pursuit of the company's sustainability ambitions is rooted in daily operations with highly visible goals and targets. We are now progressing to formalize this function as we need more dedicated resource to drive continuous progress.

## The coalition of the willing

2010 was the starting point for the first structured efforts of tying all relevant activities into a sustainability program or work stream for the company. It started with a group of passionate employees from a wide range of departments and functions across the business – described as a 'coalition of the willing'. These people were prepared to stretch beyond their job titles to collaborate in achieving a new, greener, more sustainable vision. Together, they formed what is now a cross-functional Core Team of people from Communications and Human Resources, Engineering, Operations, Sourcing, and HSE,

and challenged the Management Team to fully embrace a sustainability drive. They now report to a Sustainability Board consisting of the VP Communications & Human Resources, VP Operations, VP Quality & HSE who review, endorse, challenge and drive sustainability activities suggested by the Core team, seeking and ensuring the support of the full Management Team, including the CEO. With hands-on knowledge of the business and a global network into each function, this team has been pushing the sustainability agenda, suggesting policies, initiatives and objectives to drive progress aligned with core business strategies and objectives. They also encourage and manage our sustainability reporting.

Health and Safety has always been a key priority and has had even further emphasis since 2010. Determined to develop an even stronger safety culture which went beyond simply improving safety performance measures, we established a dedicated governance structure anchored at the very top with a Global Health Safety and Environment (HSE) Council chaired by the CEO. The Global HSE Council sets the strategic direction for the safety improvements throughout the company and has formal ties to regional as well as site level safety organizations that work with the operations and drive implementation. These site level safety organizations are mandated to review and establish local policies and procedures, as well as drive safety improvement initiatives with local management to raise awareness and promote safe behavior.



# Values & Integrity

LM Wind Power is a value-driven organization. Our values serve as an overall framework that guides the behavior and decisions of everyone in our company. By integrating the corporate values into our daily work, we have a strong common foundation for active collaboration required to manage a global business which is striving to create cutting edge technology.

Our values are the cultural framework under which we do business but it is our Code of Conduct that governs how sustainability is ensured in business operations. It offers guidance to ensure ethical behaviors and integrity at all times, aligned with international conventions and national laws.

We employ a company-wide appraisal system, the Performance Management Process (PMP), which facilitates a yearly cycle of objective setting, reviews and assessment. The assessment of our employees' performance gives equal weight to their ability to meet business objectives and how the results were achieved, i.e. whether they applied the company's values. Tying behavior directly to appraisals and remuneration is a strong driver to

promote a collaborative culture that is characterized by respect and customer focus.

LM Wind Power's Code of Conduct is our core document, providing the ethical framework for how we interact and do business. It addresses the following main items: Business Principles, Anti-Corruption and Anti-Bribery, Human Resources and Rights, Environmental Principles, and Responsibility of Managers and Employees. The document, which was formalized for the first time in 2007, is signed off by the CEO and is reviewed and updated regularly to reflect changes in regulations. In 2012, reference to the UK Anti-Bribery Act was implemented reflecting our British ownership. In 2014, the Code of Conduct underwent a further in-depth review to elaborate on some of the topics and add a reference to a new SpeakUp system - a whistleblower hotline - which enables employees to report compliance concerns anonymously. This will be implemented in a staged process beginning in 2015. All new salaried employees sign the Code of Conduct when they join the company and since 2012, an e-learning tool has been deployed to ensure the rules are clear.

## Work as one team

At LM Wind Power, we work together towards clear common goals and objectives. We strive for consensus by recognizing the value of others' opinions and proactively share experiences to drive continuous cross-organizational learning. We cooperate closely and in alignment across geographical, cultural and functional boundaries to make sure we act as one company all around the world.



## Focus on customer and market

We dedicate ourselves to valuable and long-term partnerships with our customers. We proactively develop solutions that meet their expectations. We meet customers with the same friendly, helpful and collaborative behavior anywhere in the world. Our focus is on creating outstanding value by listening and reacting according to our customers' and market needs.



# Values & Integrity

Additional, high-level, face-to-face training is conducted in certain regions according to need. Updates are typically brought to the attention of the newly-formed Integrity Committee, chaired by the Chief Financial Officer and managed in collaboration between HR, Legal and the Internal Audit function.

LM Wind Power leaders are responsible for fostering a culture in which compliance with the Code of Conduct and its spirit is widely understood. However, the Code of Conduct is not only communicated internally; it is also a core element of our continuous collaborative engagement with suppliers, where it sets out clear expectations and requirements

regarding their ethical practices as a requirement for doing business with us. We expect them to follow all applicable laws and regulations, conduct business with integrity, promote fair employment practices, safe workplaces and protection of the environment and avoid conflicts of interest between personal and work affairs.

Sustainability is directly linked to profitability; For LM Wind Power a sustainable business is a viable and profitable one. Only when the company is profitable can it fulfil its commitment to make a long term positive impact on the environment and society. We believe that sustainability performance needs to be adopted and driven by the whole organization, in collaboration with the supply chain, customers, governments and local communities.

## Take ownership

We recognize that we all need to take ownership to make our company a success both as individuals and as a team. This means that we demonstrate and recognize personal initiative. We meet our commitments and do what we say! We do not let functional or role responsibilities prevent us from achieving common goals and we are always prepared to take the necessary decisions.



## Trust and respect

Our most important asset is our people. We believe that the diversity of our employees and partners enriches us and contributes to creating an exciting workplace with room for personal growth and development. Trust and respect are the foundation for this complemented by open and honest dialogue at all levels. We recognize the value of peoples' differences and enjoy learning from others!



## Innovate for excellence

Our company was founded on a spirit of entrepreneurship and innovation and this has become a part of our identity. This means that we challenge the status quo relentlessly and strive to improve continuously. We think out of the box using our collective creativity to pursue quantum changes. We foster an environment that encourages innovation and attracts outstanding talent. Our focus on innovation helps us develop and produce class-leading, reliable products and services.



Stakeholder engagement

# Together, we capture the wind to power a cleaner world

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LM Wind Power's sustainability organization grew from its own employees' will and interest - not a top-down management directive. An energetic core group of engaged and informed employees pushed for awareness and change. The challenge associated with this is the constant necessity to secure attention from senior leadership among so many pressing demands on their time and ensure they assign the required resources and budget. Through this internal lobbying process, we have gradually cleared the way for implementation of larger projects which we expect will include a full Life Cycle Assessment, (LCA) of a wind turbine blade. In general, the company's leadership has been highly supportive, and we have the full backing of the Head of Sustainability at our owners, who acts as an advisor and driver of sustainability activities, working

directly with the Core Team and the Sustainability Board with a focus on long term value creation.

The main criterion for identifying our key stakeholders was their significance and contribution to our current and future business success, and their fundamental impact on our sustainability performance. The stakeholder identification process was a thorough and systematic analysis of the stakeholders we engage with directly and indirectly across the business. The questions we asked ourselves were: Who is directly impacted by our business? Who is indirectly impacted by our business? Who are we dependent on to do business? Who can we influence in a positive and meaningful way?



**4,505** People worldwide

## Employees

Our employees are, not surprisingly, a key stakeholder group. They act as ambassadors and direct implementers of sustainability initiatives and we engage with them on several levels to improve their skills and knowledge, raise their awareness about sustainability strategy and build ownership. The Performance Management Process (PMP) is an important backbone of those efforts and acts as the formal structure to ensure regular engagement and dialogue on career aspirations, development and more.

In 2014, the organization worked with the actions coming out of the company-wide Employee Engagement Survey conducted in the autumn of 2013. People development and communication, to boost the company's reputation and thereby employee pride, were among the topics that were highlighted as potential areas for improvement. Several initiatives were launched to address these, including a leadership and career development program targeted primarily at the leaders in our manufacturing operations, called 'Grow Plant Leaders'. We will repeat the Employee Engagement Survey in the autumn of 2015.

## Owners

Doughty Hanson was one of the first private equity funds to appoint a dedicated Head of Sustainability leveraging Environmental, Social and Governance (ESG) principles as a driver of long term value creation and risk management in portfolio companies. This commitment has propelled LM Wind Power's sustainability efforts, ensuring that it remains a strategic activity with top level engagement. With specialist knowledge on sustainability and a clear view on how there is potential for the company to do more, our owners challenge us to further embed sustainability into our business processes, often pointing to the areas where it makes the biggest difference and supports long term value. We engage with our owners on sustainability several times every month through direct contact between either the Core Team or Sustainability Board members.

## Suppliers

Our suppliers are our business partners and they play a crucial role in our efforts and ability to achieve high quality products and safety standards while delivering innovative products. We engage continuously in cooperation with our suppliers to reduce the use of hazardous chemicals and improve safety, quality and processes. Our ultimate goal is better, cheaper and more sustainable products.

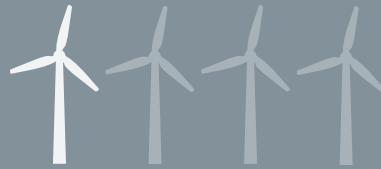
Suppliers are not only required to live up to high standards on quality management and processes, we also expect them to adhere to ethical, social and environmental standards, as defined in our Code of Conduct and Global HSE policy. However, we recognize that there could be potential sustainability issues in our supply chain that cannot necessarily be discovered through random audits and screenings, so last year we began to intensify dialogue with our key suppliers to assess their maturity level on sustainability and extend an invitation to collaborate to achieve shared goals.

The first round of supplier dialogues focused on the suppliers of balsa and those representing the majority of our spend. They are based in various locations across the US, Turkey, Papua New Guinea and Ecuador and each differs in size and capability in terms of sustainability. Some of them are large companies with dedicated sustainability functions; others are smaller companies that drive their activities through a committed management. With renewed growth in the whole wind sector, demand for key commodities is increasingly tight with significant pressure on supplies. Our goal is to maintain our high standards of ethical sourcing and where full compliance with our standards is not yet achieved to apply our influence as a customer and find shared paths forward to improve standards

We have generally increased supplier dialogue and engagements continue through supplier quality training sessions. We conduct an annual Global Supplier Day and have increased demand for higher sustainability standards which are imposed and monitored through our Supplier Commodity group.

## Governments and government bodies

Policies and frameworks continue to influence our industry and business and we engage with governments at various levels in the countries in which we operate. At a policy level, we engage closely with industry bodies, but also increasingly, the emphasis has been on speaking in our own voice. This applies, for instance, in the US, where we have actively voiced our views on the Production Tax Credit (PTC), inviting politicians and government officials to visit our facilities and see the value we create first-hand. We believe we need to engage openly and try to influence decision makers to continue to support the development and expansion of wind power. We engage with local governments for licenses, regulatory issues and support, always adopting an open and collaborative approach. In many areas, we have developed close ties, which enable us to exchange knowledge, for example, on issues like employment, work environment, waste management, and health and safety where we strive for mutual learning and achieving improvements.



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**1/4** Turbines in the world have LM Wind Power blades

## Communities

We rely on the communities that host our manufacturing plants around the world for resources, infrastructure and access to a capable workforce. We engage openly and collaboratively with those communities to foster mutually beneficial relationships. The employment and training opportunities we bring are always much appreciated. In addition to the employment we provide directly in a strategically important, green business, further work is created in construction, engineering and technical sectors. LM Wind Power's expanding global manufacturing footprint has a strong track record of attracting further local investment from other companies, institutions and service providers. An active policy on local sourcing helps foster a local supply chain, contributing to local growth and indirect job creation. Economic development is an important benefit but our local teams go further to improve the quality of life of communities in other meaningful ways. Our staff engages in a variety of community outreach projects and programs, including charitable donations, support for education, disaster relief, and collaborations with NGOs to support vulnerable people. LM Wind Power operations in India is an outstanding example with a particularly strong program in place, which reflects how they consider the local community as a major stakeholder to benefit from the company's success.

## Customers

Our customer relationships are often long-term partnerships and we engage closely to ensure our solutions meet their needs and expectations in terms of quality, reliability and cost. Traditionally, customer requirements related to wider sustainability concerns have been limited, but in recent years we have seen an increased interest expressed in several ways, including supplier assessment programs and screening processes when exploring a potential collaboration or extended relationships with the company.

We have received surveys from customers inquiring about our sustainability policies and performance several times during the past couple of years. When responding, we have noted that the questions very much reflect the principles and structure of the UN Global Compact, which confirms to us that our activities and approach align well with our customers' requirements. We do, however, see potential for further engagement to identify shared sustainability gains that increase the long term value creation for both us and them. An example could be to develop a sustainable blade disposal solution, which has already begun with industry partners and leading academic organizations in the Danish GenVind project.

# Stakeholder engagement matrix

Stakeholder	Engagement	Examples from 2014
Employees/ leaders	Employees are encouraged to share their thoughts and reflections on the company and workplace through daily contact with their managers. In 2013, the first company-wide Employee Engagement Survey was conducted. This will be repeated every second year.	January workshop with 14 leaders from the Global Operations organization, talking about sustainability. Interviews with regional leaders on the meaning and importance of sustainability were broadcast to all employees through the internal TV channel. Global Sustainability summit in November with representation from key functions, top management, our investor and external guests. Global Sustainability newsletter translated into six languages, sharing sustainability stories from around the world.
Customers	We have a shared interest to deliver the most efficient products at the lowest cost with our customers. In addition to daily contact, we engage through response to surveys and documentation for the customers' supplier assessments, continuous dialogue on lobbying efforts in key markets and the prospects of developing a potential blade disposal solution which is a key challenge for the industry to solve. We also send out an annual Customer Satisfaction Survey to secure wider feedback on the collaboration.	Dialogue on lobbying in the US and Canada to secure continued support for wind. Annual Customer Satisfaction Survey, which was distributed to 137 customer representatives and completed by 40.1% of recipients in 2014 (a similar response rate to the 2013 survey, which was 41.1%).
Suppliers	Our suppliers are key to our success and we have increased engagement with them, to identify and reduce risk, and to build stronger partnerships.	Supplier Quality training with 23 representatives from 11 Chinese suppliers to educate them on LM Wind Power's quality standards and forge stronger ties. Global Supplier Day in October talking to 40 representatives from the supplier base, assessing the potential level of engagement and inviting them to collaborate and share experiences. Continuous dialogue on how to secure higher industry standards from balsa suppliers in a period of significant industry growth.
Communities	We rely on local communities for employees, and provide economic activity with our operations. We actively engage through partnerships with NGOs and community groups as well as with various philanthropic activities.	Globally: we invited hundreds of employee family members to Family Day events at all locations, to learn more about LM Wind Power and wind energy. US and Spain: Food drives. India: Medical check-ups, medicine distribution, sponsorship of five children with special needs, and home safety awareness training for employees' families. Donation of new classroom and improved infrastructure at a local school. Canada: Open house at our Gaspé plant for Quebec Wind Energy Day June 15. Denmark, US, Poland and The Netherlands: Student visits sponsorships and internships.
Governments and government bodies	We actively engage with the local government as key stakeholders of our operations worldwide. At a regional and national level, we interact with decision makers on issues related to energy policy.	Meetings with Representatives in the US three times in 2014 – AWEA (American Wind Energy Association) hosted event in Washington in February, visit by Congressman Tim Griffin at our Little Rock plant in July, Little Rock plant visit by the energy aid to Senator Boozman in September. Lobbying in Quebec to secure continued support for wind. Collaboration with The National Institute for Occupational Safety and Health (NIOSH) in the US on breakthrough research regarding potential health effects of chemicals in production.
Owners	We have very dedicated owners who are active supporters of sustainability as a factor in long term value creation.	Presenting with Doughty Hanson's Head of Sustainability at the BVCA (British Private Equity and Venture Capital Association) in October. Discussions on gender diversity at all levels, including in the Supervisory Board in connection with reporting of the annual results and other topics such as how to ensure sustainable material sourcing, for example, of balsa.

# Supplier dialogue is key to success



As an international company with manufacturing facilities across four continents and eight countries, including Denmark, Spain, Poland, Canada, USA, India, China and Brazil, we have built a global network of suppliers from whom our operations purchase raw materials and core components. We do business with more than 200 suppliers, a handful of which are regarded as strategic partners, representing the majority of our spend. These are big, reputable companies, with well-established brands and certified quality management systems which ensure security of supply and high standards of operation. The majority of our spend is concentrated on a few suppliers, all of which have an international presence.

The supply chain of the wind industry is complex and needs to continuously drive down cost while developing the processes and systems required to make a quality product with maximum reliability. LM Wind Power's Supplier Management strategy focuses on selecting the best suppliers based on their performance and capability to deliver world class products in terms of safety, quality, delivery, cost and features. All

## Training and dialogue with local suppliers in China

"Quality management in the supply chain is a crucial element to be successful in the wind market and one of the ways to achieve that is to forge stronger ties to the suppliers," said Engineer David Liu, on the background for one of the latest initiatives by LM Wind Power's Supply Quality Development (SQD) team.

In the summer of 2014, they hosted 23 representatives from 11 Chinese suppliers at a two day workshop on LM Wind Power's requirements to raw material. The suppliers got a thorough introduction to the organization, processes and quality standards of LM Wind Power products with the purpose of helping them to deliver consistent high quality. The key words for the workshop were: setting clear expectations and strengthening the relationship.

The initiative has been very well received and based on the positive feedback from the suppliers the SQD team quickly started to look at expanding the training to cover suppliers from other regions. The program will also continue to have a focus on China as all major suppliers of raw materials have a base there.

"We have launched several initiatives, systems and processes to improve material quality with our suppliers during the last couple of years," said David Liu. "Now we need to ensure successful implementation, and for that we are completely dependent on strong commitment from the suppliers. This type of training and dialogue show them we care and that they are part of our success."

potential suppliers must have a Quality Management system complying with ISO 9001:2008, and we also strongly encourage suppliers to get certified according to ISO 14001:2004 and ISO 18001:2008.

All new suppliers undergo thorough scrutiny checks via the Supplier Quality Assessment, to ensure that they live up to our product quality, good governance and environmental standards. We screen suppliers on a variety of metrics to find out if they have, for instance, risk assessment, change management, process control, and employee training programs in place. Suppliers must score sufficient points to meet the threshold for acceptance, and we develop an action plan for poor performers.

As of 2014, 98.5% of suppliers were covered by the Supplier Quality Agreement, which includes requirements to sustainability practices - up from 92% in 2013.

Working closely with our suppliers on securing a consistent supply of high quality materials resulted in significant improvements in 2014. The material incompliance rate decreased significantly and went from 12,700 Parts per Million (PPM) in 2013 to 2,237 PPM in 2014.

Compliance is key, but communication is also vital, and we are committed to increasing the dialogue with our suppliers to further address sustainability together.

Since 2013, we have hosted an annual Global Suppliers Day with approximately 40 suppliers represented, and with sustainability explicitly on the agenda. At this event, we shared our ambitions to promote sustainability further in the supply chain and clearly stated our expectations to our suppliers as partners. Fostering a more responsible supply chain is a challenge that we acknowledge requires ongoing efforts, including active communication and collaboration to make sure the initiatives move beyond monitoring and "check the box" assessments. We aim for an engaging and mutually beneficial partnership and have launched various initiatives with the Supplier Quality Development team to get closer to our suppliers while building sustainability further into the collaboration.

# 200+

suppliers worldwide

# 98.5%

of suppliers covered by  
Supplier Quality agreement

# 82%

reduction in material  
non-compliance rate

# Sustainability commitments: Defining material aspects

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LM Wind Power is a green company but are we green enough? This statement underpins all our sustainability activities and priorities. We operate in the renewable energy industry, providing a product that contributes widely to long term sustainability, but at the same time, we are a manufacturing company that uses material and energy, produces waste, has an impact on people and influences local infrastructure and communities.

When we joined the UN Global Compact in 2010, we went through a thorough process to identify key stakeholders, map their interests and expectations, and made an assessment of

potential impacts on the bottom line. We worked with a consultancy, co-facilitating the process but conducting the stakeholder interviews internally. Part of the process was the definition of specific performance indicators based on the GRI G3 Framework. Our current sustainability headlines - Safety, People, Environment and Technology - are a direct outcome of this mapping exercise. The indicators identified back in 2010 still form the basis for the aspects included in this second G4 report, with some changes implemented in the process of transitioning to the G4 Framework last year.



Various factors were considered, such as the significance of the impact to the company and its stakeholders; risks to ourselves and our identified stakeholders; our external compliance commitments, both voluntary and with regards to laws and regulations; global sustainability trends and challenges, the potential for achieving operational efficiencies and competitive advantages and our ability to influence the performance in a meaningful way. The fundamental requirement is that the sustainability metrics make good business sense and the process of measuring their performance becomes part of a value-creation strategy.

Despite clearly recognizing that the ideal way would be a structured stakeholder engagement process, we have had to go through a less formal process when revisiting the material aspects for this 2014 report. Nonetheless, this approach did involve input from a wide group of stakeholders which we received through the Sustainability Core Team, and which was conveyed to our colleagues in different departments in various

# 65%

decrease in LTA rate  
since 2011

meetings. We believe that the sustainability areas of focus we have pursued do represent genuine material matters for the company. It can always be debated that more material issues should be added but for us, the importance is the relevance and effects, rather than the quantity of metrics.

Our ambition is to refine and focus the reporting much more, allowing us to present fewer topics but to go into more detail and integrate sustainability metrics with financial metrics to a greater extent where relevant and

## Health & Safety

Material aspects	GRI aspects	Boundary	Stakeholder
Towards zero injuries	Occupational Health and Safety	With the overarching idea that 'Safety is everyone's responsibility', we make sure that all personnel in our plants worldwide are aware of risks and motivated to make safety a priority. It is instrumental if we want to get to our target of zero accidents and achieve world class standards. Aiming for improvements on safety also requires reliable and certified suppliers as an assurance of high level quality. We review health and safety implications in the early stages of product development and when introducing new materials or processes in our manufacturing.	Employees Suppliers
Building safety culture	Occupational Health and Safety	Building a successful safety culture takes commitment at the top with global and plant-level managerial oversight. But the most important stakeholders are the employees. With our targeted HSE campaigns and training we make sure that all personnel are made aware of dangers inherent in their jobs, and are equipped with essential protective equipment, skills and competences to perform their work safely.	Employees
Building safety culture	Customer Health and Safety	One of our core values is Focus on Customer and Market, applying a mindset that strives towards continuous improvement. Both LM Wind Power and our suppliers develop processes and systems required by our customers to meet their demand for high quality and safe products.  Thus, we review health and safety implications in the early stages of product development and when introducing new materials or processes in our manufacturing. If the health and safety implications of a certain substance or material are not sufficiently documented, we prefer working with materials that have well-documented and known risks so that we can take precautions. We work with suppliers and research institutions to develop safer and more environmentally friendly chemicals, equipment and tools.	Customers Employees Suppliers

possible. The ambition is clearly to go further because we recognize that the prioritization and final reporting on material issues could be validated in even greater detail. We surmise that the process of doing a more thorough validation with our stakeholders is potentially where the real value of the sustainability reporting process lies.

### **Safety, Environment and People**

For a company in the renewable energy industry, the environmental metrics, not surprisingly, represent a major part of the list. We are part of the solution to environmental and climate change challenges and so it is of strategic importance to us to reduce our own impact as well, for example through focusing on carbon emissions and water consumption. As a manufacturing company with thousands of employees building blades in our plants around the world, health and safety aspects are also a key priority. We need to keep our people safe and efficient and we have focused a lot on this area, improving our performance to the highest industry standards on several aspects. HSE performance remains at the very heart of our sustainability program, because we regard our people as our most impor-

tant resource and because we believe that safety and well-being of employees is a direct contributor to business performance and ultimately, profitability.

### **Technology**

Through our focus on technology and innovation, we wish to strengthen our competitive positioning and growth opportunities, while contributing to the expansion of sustainable and clean energy. Our main sustainability challenge and opportunity lies in promoting the progress and growth of renewable energy; this can be accomplished with more effective products, processes and services, which are achieved through innovations and economies of scale. The future of the industry rests on our joint ability to remain competitive, to capture the wind more effectively and to improve its attractiveness as a mainstream energy source. The innovative products we launch are all built with this purpose in mind and we continue to innovate for excellence in development and manufacturing. Our engineering function is also key to minimizing the environmental footprint of our own product, including during development, manufacturing, operation and disposal at end of life.

## Environment

Material aspects	GRI aspects	Boundary	Stakeholder
Reduce carbon footprint through reduction of material use, energy consumption and waste generation	Energy, water, emissions, effluents and waste. Supplier Environmental Assessment	<p>The company is mapping its carbon footprint in its global manufacturing operations from material consumption, energy consumption, and transportation of people. We are in the process of including waste in the metrics in more detail and ultimately moving towards a full Life Cycle Assessment (LCA) approach.</p> <p>Environmental protection is one of the targets of our HSE policy, which requires commitment to and accountability for preventing pollution and promoting sound environmental practices from all employees and suppliers. Various projects, primarily local ones, focus on reducing energy consumption in the plants e.g. by upgrading or replacing ventilation systems and machinery, sourcing electricity from renewable energy where possible and installing energy management systems. We also work internally and with our suppliers on optimizing our material consumption to reduce waste and cost. This includes implementing initiatives to reduce, re-use and replace hazardous materials in our manufacturing.</p>	Employees Environment



The list of material aspects, their boundaries and significance to stakeholders has not changed since the 2013 report.

## People

Material aspects	GRI aspects	Boundary	Stakeholder
Compliance & integrity	Investment. Non-discrimination. Freedom of association and collective bargaining. Child labor. Forced or compulsory labor, Supplier human rights assessments. Supplier assessment for labor practices. Anti-corruption	We recognize the challenges inherent in managing a diverse and multicultural workforce as well as having a global network of suppliers. We need to remain vigilant for human rights abuses, fair employment and discriminatory practices, and corruption and we try to manage these challenges through safeguarding compliance with our Code of Conduct. We expect all our employees and suppliers to adhere to our Code of Conduct.  The integrity with which we conduct our business is also important to our customers, who not only emphasize quality and safety aspects of the products we deliver but also our sustainability and ethical performance.	Employees Suppliers Customers
Developing competences	Training and education	Our success comes from the knowledge, competence and integrity of our workforce, so our focus is on improving their skills and developing their careers through targeted training and appraisals. We have built a comprehensive employee development scheme, based on individual assessments for both salaried and hourly paid employees. These include HR programs, talent and career initiatives, appraisals and reward systems as well as various schemes for on the job training in a combination of local and global initiatives.	Employees
Contribute positively to the communities in which we operate	Local Communities	As an international company, with plants in remote parts of the world, we strive to have a lasting positive impacts on the communities in which we operate, ranging from job creation and economic development to employee driven charity work. Involving employees in charity initiatives also has a positive effect on our organization and our people's commitment. The community outreach activities are particularly strong in India, the US and Canada.	Communities Employees

# Building a more sustainable environment



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# Managing risks and identifying operational efficiencies while reducing impact

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LM Wind Power is part of the green energy industry, with more than 175,000 blades produced since the late 1970s. This corresponds to approximately 70 Gigawatts (GW) of installed wind power capacity, which helps compensate for millions of tons of CO<sub>2</sub> every year, contributing ultimately to the global battle against climate change.

Wind power is the most viable source of renewable energy, releasing minimal carbon emissions while reducing dependency on fossil fuels. There are, however, environmental impacts associated with the manufacturing, testing, transportation and installation of the wind turbines, where processes require resources and energy and produce waste. All stages in the life cycle of a blade – from raw materials extraction and processing, through blade manufacturing and transporting to product disposal at end of life – leave an imprint on the ecosystem. We are committed to reducing this impact and we work to do that while harvesting operational efficiencies.

For this purpose, we identified the following as priorities:

- **Assess and reduce Greenhouse Gas (GHG) emissions / Manage carbon footprint**
- **Reduce resource consumption and waste:**
  - Material & Energy consumption
  - Water consumption (particularly material in India)
  - Waste generation and handling
  - Waste treatment and recycling

**“We map the development and CO<sub>2</sub> emissions from our material consumption, energy consumption, transportation and waste to try to reduce our impact.”**

Our efforts are guided by a structured approach anchored in our global HSE management system and specific activities to drive progress at plant level:

- **External certifications of HSE management system:**
  - All LM Wind Power sites (except for the blade manufacturing facility in Brazil, inaugurated in October 2013) have completed certifications according to ISO 14001:2004 and OHSAS 18001:2008, which means we have achieved a globally certified, integrated HSE management system.
- **Environmental Sustainability Policy & Management system:**
  - Environmental protection is one of the targets of our HSE policy, which requires commitment to and accountability for preventing pollution and promoting sound environmental practices from all employees and contractors. Local managers are held responsible for governing compliance, ensuring communication and successful implementation of these responsibilities.
  - The policy is accompanied by an HSE Management System Manual, which defines management processes for impacts identification, legal compliance, strategy and goal setting, training, communication, document control, emergency preparedness and response, performance and control measures.
  - Local HSE managers undertake routine HSE inspections to monitor implementation whereas yearly management review meetings are held to follow up on pertinent aspects and take all necessary action to drive continuous improvement.
- **Risk assessments and control**
  - Every time we change material, equipment or processes, the responsible managers and employees perform an HSE risk assessment, taking into consideration potential hazards for the people involved in doing the job or for the environment. The job/change cannot start before the risk assessment has been conducted and clear plans for how to manage a potential risk have been put in place. This is a core process which is also thoroughly described in the company's global Business Management System.

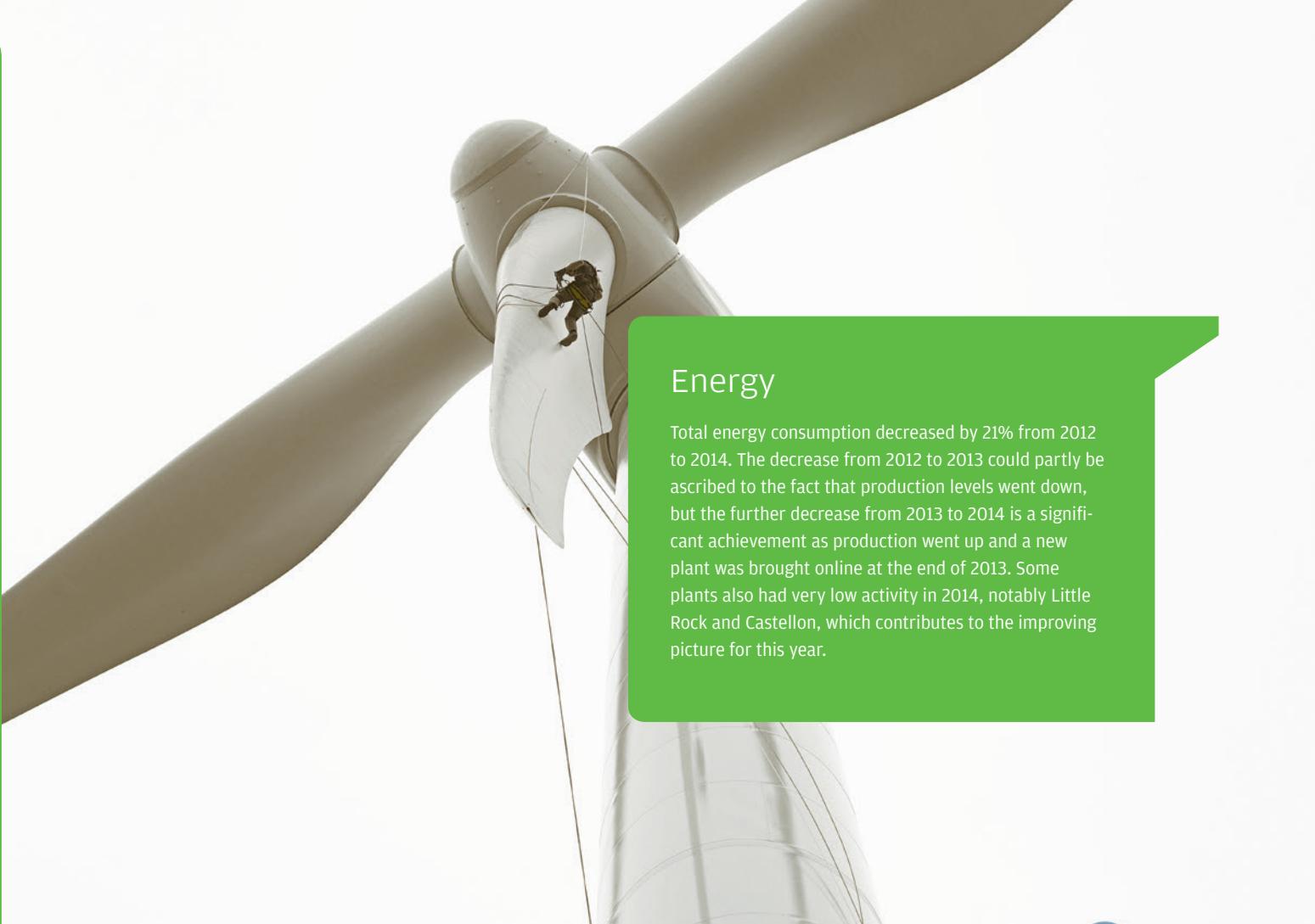


## Material Use, Energy, Waste and Water

The environmental performance in our operations is tracked worldwide via the SoFi system. This is a dedicated sustainability reporting software in which people from various functions within each plant insert data on a monthly basis. Data comes primarily from HSE and Facility Managers. The data is presented and reviewed along with other core performance indicators at the monthly Business Operations Review chaired by the VP, Operations. The carbon footprint reported in the annual report is a reflection of this data. For now, the company is mapping its carbon footprint from materials and energy use in the operations, which represents the vast majority of our activities, and is in the process of including waste. It is the ambition to map the full life cycle impact of its products and activities in the future.

## Standards, methodologies and assumptions used

The data on environment is reported as a total for the whole group with the blade manufacturing business representing the vast majority of material consumption, energy, water consumption and waste generation. The data has been consolidated using an automatic calculation in the sustainability reporting software SoFi, to which each plant adds its energy data every month. The system automatically converts units, depending on the desired output format. The conversion factors are integrated in the system based on the GHG protocol and is managed completely by the provider of the SoFi system.



## Energy

Total energy consumption decreased by 21% from 2012 to 2014. The decrease from 2012 to 2013 could partly be ascribed to the fact that production levels went down, but the further decrease from 2013 to 2014 is a significant achievement as production went up and a new plant was brought online at the end of 2013. Some plants also had very low activity in 2014, notably Little Rock and Castellon, which contributes to the improving picture for this year.

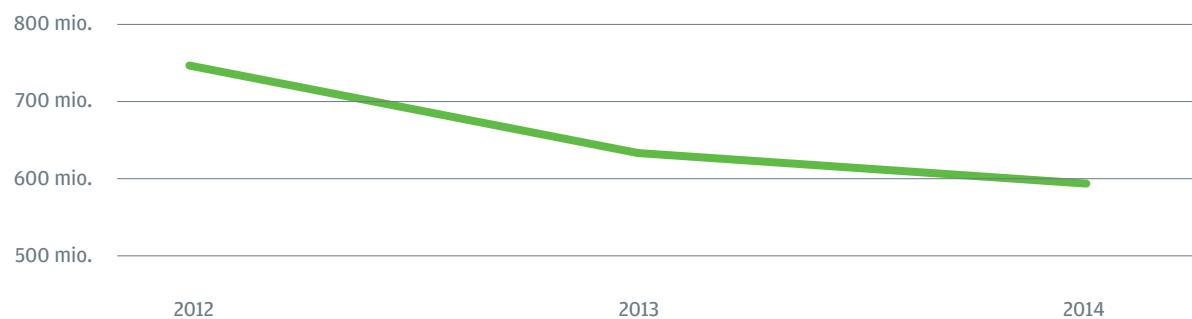
Year	Energy consumption in operations (MJ)
2014	595,021,985
2013	635,722,624
2012	752,211,102

Total energy consumption in joules or multiples

**21%**

decrease in total  
energy consumption 2012-2014

Energy consumption MJ



**Total fuel consumption from non-renewable fuel sources in joules or multiples, including fuel types used.**

Year	LPG	Diesel	Gasoline	Natural gas	Heating oil	Fuel*
2014	16,297,431	21,527,029	211,932	209,010,996	0	247,047,387
2013	16,058,924	62,542,326	1,621,073	266,568,303	190,204	346,980,830
2012	16,752,666	168,029,520	193,756	218,268,817	367,474	403,612,233

The elimination of heating oil in the reported data is due to the disposal of Svendborg Brakes which was effective in November 2013.

**Total fuel consumption from renewable fuel sources in joules or multiples, including fuel types used.**

We are presently assessing how to secure granular data in this category but even without the detailed split, there are clear geographical trends. In Denmark, for example, a high proportion of the electricity consumed comes from wind power as

30% of the country's electricity supply comes from wind. In countries such as China, the share of energy coming from renewables is as yet relatively low. In India, local initiatives have ensured that road lighting and water heating for showers in the facility now come from solar power.

**Total electricity consumption**

(no specific data for heating, cooling or steam)

The increase in electricity consumption corresponds with the ramp up in production and adding a new manufacturing facility in Suape, Brazil which was not included in the 2013 reporting. (The plant was inaugurated in October 2013.)

Year	Electricity for production equipment, lights and ventilation (MJ)
2014	347,974,598
2013	288,631,814
2012	348,598,869

# Blade production, material use and waste generation

## Waste

Although many of our plants operate with almost zero waste to landfill, the total waste to landfill amount increased in 2014. This is a direct result of increased activity in our American plants. The lack of local recycling or incineration solutions for waste disposal means that the US operations represent more than half of our total waste to landfill globally. We are not satisfied with this situation and are working on finding better solutions with suppliers who might be able to use our waste in other ways, perhaps as input to new products. In general, the waste is always disposed of according to local regulations and conditions in the countries in which we operate. In some countries, like Canada and Denmark, regulations are designed in such a way that waste that would be recycled or incinerated in other parts of the world has to go to landfill. The majority of our waste to landfill, however, is filed in the US where there is

not yet a firmly established imperative for recycling at our locations generally and a lack of better alternatives. In other countries, such as Poland and China, waste to landfill is almost non-existent due to a high level of recycling and incineration. Reducing waste remains a crucial activity to lower operational cost and improve efficiency while minimizing the company's environmental impact.

Better waste management has a direct impact on the bottom line, especially when waste that would otherwise go to landfill is sold off to be used in other products. This is particularly widespread in China and India. In Brazil, waste glass is used by a local company to produce waste bins and water containers, which are donated to vulnerable local families, schools and communities.

## Waste



Year	Blades produced
2014	8,262
2013	7,173
2012	8,856
2011	10,333
2010	10,241

Year	Raw materials (tons)
2014	65,758
2013	59,097
2012	93,135
2011	69,078
2010	64,374

Year	Total waste in Kg
2014	21,259,860
2013	16,204,841
2012	22,214,878
2011	23,739,012
2010	17,458,369

The company's global waste reduction program focuses on eliminating waste before it's generated. This global waste reduction program is running in its fifth consecutive year and continued to exceed targets in 2014 with an actual waste saving of EUR 4.3 million compared to the target of EUR 2.7 million. The total saving since the program's inception amounts to more than EUR 20 Million, and tons of waste to landfill have been avoided – approximately 3 million kg in 2014 alone.

The majority of our saving initiatives are generated on the shop floor by creative employees dedicated to working smartly and cutting out waste from the manufacturing process. The idea generation culture is stronger than ever, and is facilitated by a 'Why Not Circle' program - a methodology to bring forward ideas from the shop floor in a systematic way. Last year, every LM Wind Power employee generated 3.6 ideas that were implemented, exceeding the target of 2.

# 3.6



savings ideas per  
employee implemented



## Hundreds of ideas for reducing waste

"When you buy bananas, all you want is the fruit not the skin, but you have to pay for the skin also. It is a waste. And you the customer should not have to pay for the waste."

~ **Shigeo Shingo**, world-renowned Japanese industrial engineer.

Madhu Paranjothi Ramalingam, Senior Engineer and Waste Program Project Leader, uses this quote from Shigeo Shingo to represent the mission behind LM Wind Power's Material Waste Reduction Project: to constantly strive for more efficient ways to reduce waste in our manufacturing processes.

Since 2010, the program has aimed to reduce or reuse waste, by implementing "Quick Win" ideas. Though each individual idea may not make a huge impact, together the Quick Wins demonstrate real cost savings – several million euros to date.

Most of the ideas come from employees on the shop floor who identify potential for working smarter, safer or simply better. Valuing employees and their ideas is key to developing global best practices. In fact, many of the standard LM Wind Power solutions applied today come from the minds of our employees, as the best of their ideas are shared across the plants and functions. "The culture of always thinking about improvements is one of the factors that make us a successful business and a good place to work," Madhu said.

### A dust saving idea

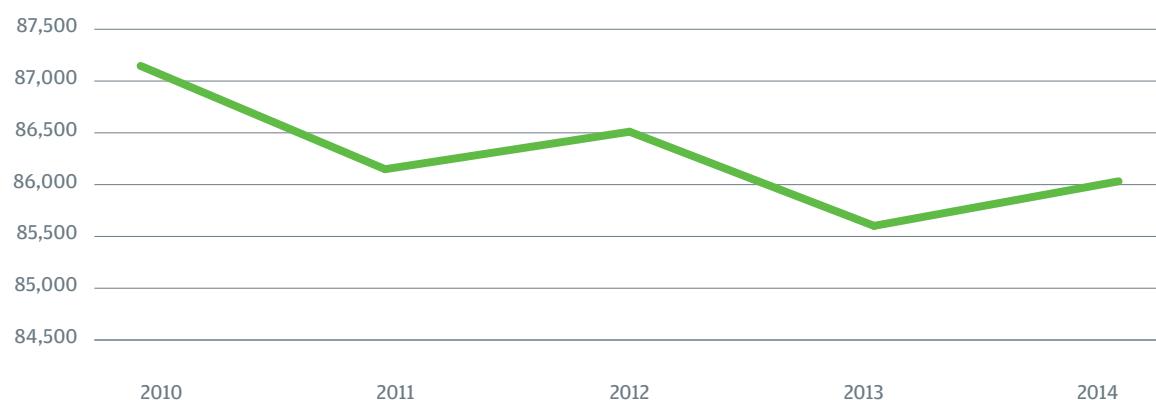
Maintenance Manager John Zheng and Tool Crib Technician Zhang Jianjun from LM Wind Power's plant in Jiangyin are very active in developing innovative ideas for the plant. Most recently they introduced a better designed dust shield for the grinder preventing the dust from escaping into the air. The idea has not only improved the work environment, it ensures an average saving of around EUR 4000 every month from the reduced need for cleaning tools and man hours in the grinding process.

## Carbon footprint

During the past few years, the organization has been working continuously on different levels to reduce the carbon footprint. Since 2013, a dedicated program focusing on energy efficiency and cost reductions has driven improvements across the business, resulting in savings of EUR 93,000 in 2014 and identified savings of more than EUR 700,000 in 2015. The bottom line improvements come from negotiations with local energy providers, awareness campaigns and installing more energy efficient equipment and intelligent energy management in the facilities and offices. The plants have had electricity savings targets of 5% per year and have generally managed to reduce their consumption.

The total carbon footprint has increased in line with the increased activity in the business. However, despite having produced more blades in 2014 compared to 2013, the carbon footprint per kg of blade produced showed a minor decrease. It is encouraging to see that the intense focus on utilizing materials in the optimum way, and the measures installed to further optimize energy consumption and efficiency, start to pay off in our carbon footprint performance.

Carbon footprint per MW blade produced

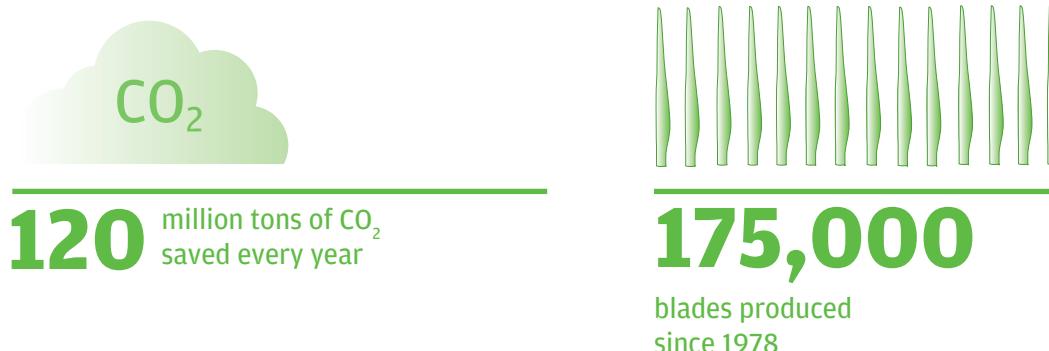
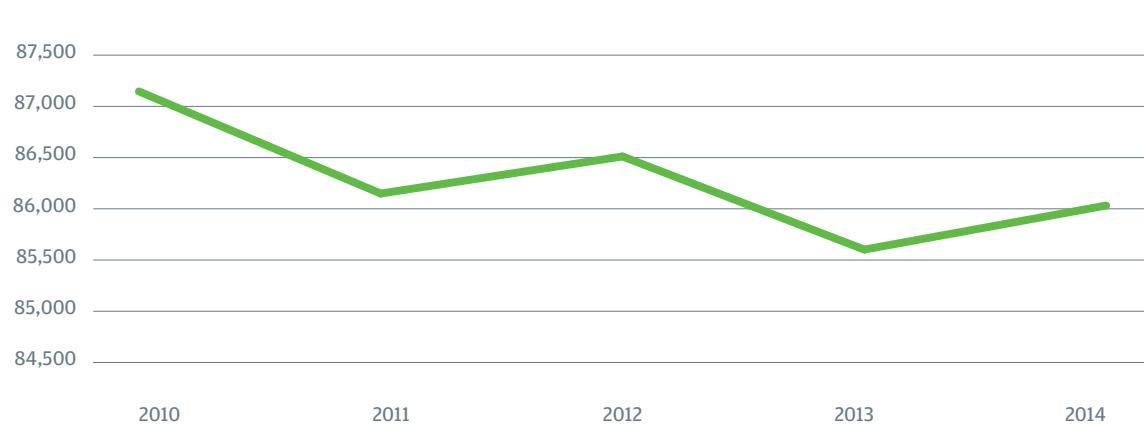


	2014	2013	2012	TOTAL Carbon footprint (Gross emissions)
<b>Scope 1</b> Direct emissions (activities owned or controlled by the organization that release emissions direct to the atmosphere e.g. emissions from owned or controlled boilers, furnaces, process equipment, vehicles etc.)	117,016	70,185	274,649	461,850
<b>Scope 2</b> Energy indirect (emissions released into atmosphere that are a consequence of our activities but which occur at sources we do not own or control e.g. emissions associated with our consumption of electricity, heat, steam, cooling)	76,174	65,633	247,141	388,948
<b>Scope 3</b> Other indirect (all other activities that release emissions as a consequence of our activities, but not indirect energy sources and which occur at sources beyond our control e.g. business travel, use of sold products or services, waste disposal)	61,617	76,992	370,103	508,712

The carbon footprint per MW blade produced also shows an encouraging trend which is indicative for the product innovation and continued quest for producing ever more efficient blades and wind turbines. Blade length is constantly expanding, driving up the Annual Energy Production (AEP) of each turbine and contributing to making wind power even more compelling.

In other words, the clean energy produced by LM Wind Power blades by far supersedes the carbon impact from its operations. We will continue to push this trend even further, gradually taking on a life cycle assessment approach to cover the full impact of the product.

Carbon footprint per MW blade produced





#### **Water consumption (m<sup>3</sup>)**

Wind energy is one of the power generation industries that consumes least water because we use very little water in our production facilities. However, we recognize that water is and will be an increasingly scarce resource in certain parts of the world and we all need to take responsibility for preserving it. The general trend in LM Wind Power's water consumption is positive, with a 12% reduction from 2013 to 2014, despite having ramped up production and increased our number of employees. Water usage is primarily for sanitary purposes and cleaning at the sites.

In some countries, like India, water consumption is a highly material aspect due to the severe water scarcity issues in that region. Our Indian plant established a rainwater harvesting system in 2010, which collects enough water to cover the majority of the consumption of the plant. Excess water is discharged to the ground again. Setting the standard for all other

# 23%

reduction in water use  
from 2012-2014

local companies, this initiative has resulted in a 5-8% increase in the underground water table.

Only our India site has a large-scale water recycling system. India accounts for the vast majority of the data under Onsite Water Withdrawal, together with a site in Spain. In 2014, however, Spain only accounted for 49.9 m<sup>3</sup> due to very low activity in Castellon. Therefore the method for calculation for Water Recycled and Reused is: On-site water withdrawal minus the data from Spain divided by the total water withdrawal data.

m <sup>3</sup>	2014	2013	2012
Gound water/municipal water	143,069	173,340	188,721
Water use, on site	41,794	37,450	50,061
<b>TOTAL</b>	<b>184,863</b>	<b>210,790**</b>	<b>238,782</b>
Water recycled and reused in India - % of water withdrawal	23	18	18

\*\* adjusted from 345,172 in 2013 (reporting error)

# Occupational health & safety



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Safe people, safe products, safe processes and supply chain management underpin occupational health and safety. Safety is at the core of our sustainability efforts and all materials that go into our blades are carefully reviewed for health and safety issues on which we strive to continuously improve.

We are working on different levels to achieve the necessary changes and we are still strengthening governance on health and safety across the business:

#### **Certification**

We control and improve health and safety performance with the occupational health and safety management system standard OHSAS 18001, which was completed for all LM Wind Power sites, except Brazil, by the end of 2014.

#### **Commitment at the top:**

#### **Establishing a Global HSE Council**

Since 2010, we have had a global safety organization in place, anchored at the very top with a Global HSE Council, led by the CEO, to promote and improve safety performance across the

group. The Council connects to site level safety organizations that work with the operational aspects and drive implementation. These safety groups review and establish local policies and procedures and drive safety improvement initiatives with local management to raise awareness and promote safe behavior.

#### **Establishing robust policies and processes across the business**

Our safety efforts are enforced from the top but the HSE success factors depend on company-wide commitment and discipline. It starts with the Global HSE Policy, which puts a strong focus on people's health and safety requiring active commitment from all employees and contractors to prevent harm, including injury and ill health. With our global HSE Management system, we ensure that we have processes in place to identify hazards prior to the commencement of any project, that we comply with applicable health and safety legal requirements, and that we establish safety goals and strategies on a yearly basis to drive continuous improvement. The system includes control measures, focusing on Personal Protective

## The strategic goals to improve workplace safety until 2017

1. Injury and Incident Free (IIF) workplace - Total Recordable Injury and Illness Rate (TRIIR) top tier performer
2. Strong risk assessment culture, fully permeated in everything we do, i.e. in all Management Of
3. Change processes and in day-to-day activities on the shop floor
4. Full visibility and clarity on the company's expectations vis-à-vis sustainability – towards employees and towards contractors Full regulatory compliance
5. Strong ownership of HSE matters by Operational Line Management
6. Strong sense of urgency with Senior Management – zero tolerance attitude towards accidents and incidents, critical safety rules and repeat offenders
7. True Learning Organization - robust performance with regards to "closing the loop and not having repeat accidents

From the LM Wind Power  
HSE Management System Manual

Equipment (PPE), equipment and operational instructions necessary to reduce or eliminate risks and emergency plans for employees. The effectiveness of the implementation is measured through ongoing internal audits, and in the event of incidents or issues arising, corrective and preventive actions are identified and implemented.

Our health and safety performance is reviewed annually at management review meetings with local representation to monitor the compliance with standards and certifications (OHSAS 18001 & ISO 14001), and reflect the effectiveness of the system.

#### **Specific activities tied into our approach to Lean manufacturing**

The LM Production System based on LEAN principles helps to provide safety in the workshops, organizing workflows to ensure quality production with the most efficient utilization of people and resources.

Our managers and employees make regular safety assessments in the manufacturing environment, quickly identify safety hazards and check the status of equipment for safety standards during 'gembata' walks through the production areas. Good ideas are systematically shared between our manufacturing facilities and each plant has a target for idea generation and implementation.

#### **Training and communication**

Safety training and communication for and with the employees to increase awareness, competence and active participation provide the foundation for successful implementation. A large proportion of our employees - 25-50% at various levels - are represented in Health & Safety committees, either at plant level or regional level (under the Global HSE Council).

Our cooperation with safety experts Du Pont over the past five years has helped us identify our risks and build up the foundation for implementing a safety culture. Their assessment of our standards and performance back in 2010 pointed, among other things, to inconsistent use of protective equipment and lack of clarity about safety rules and instructions, or lack of discipline in following them. Du Pont visited our manufacturing locations

# 440

**supervisors/team leaders went through global safety excellence training in 2014**

around the world and defined improvements to bring all locations up to a global LM Wind Power safety standard based on best industry standards. Some of the initiatives that have made a difference are specific training in Root Cause Analysis (RCA) incident investigation, a number of projects targeted at handling chemicals and fire safety, and a strong focus on improving safety for working in confined spaces. New and more robust processes have been put in place to make sure key HSE aspects are being assessed and taken into consideration when developing new products, setting up new factories and when introducing new materials.

Furthermore, we have invested significantly in training courses. In 2014 alone we conducted global safety excellence courses for 440 supervisors/team leaders, which featured a full day diving into Root Cause Analysis methods and ways to have constructive dialogues with colleagues on safety.

We were also one of the first companies in the industry to introduce a revised global confined space procedure aligned with recently introduced EU regulations.

#### **Performance and awareness**

LM Wind Power has been on an important journey towards excellence within Health & Safety over the past five years, continuously improving performance through increased awareness, more rigid enforcement of rules and procedures and intensive training for key personnel, focused on behavior, culture and dialogue. We have built up a strong organization with systems and structures in place, and awareness is at a very high level. The detailed reporting of safety data shows how these efforts paid off in terms of significantly improved safety performance in the manufacturing facilities. Safety dialogues

<b>Year</b>	<b>Number of employees/ end of year (incl. contractors)</b>	<b>Injury rates (involving lost time) per million working hours</b>
2014	4,953	2.0
2013	4,851	2.9
2012	5,122	4.0
2011	5,803	5.7

We do not have this data split by gender.

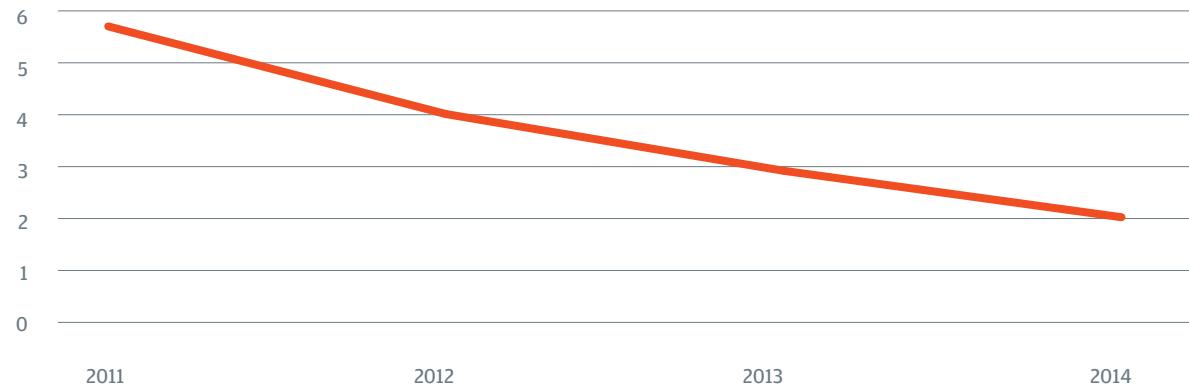


have become a daily routine and the overall safety drive has also contributed to improved manufacturing quality and ultimately, customer satisfaction. The next big step will be working even more on culture and behavior.

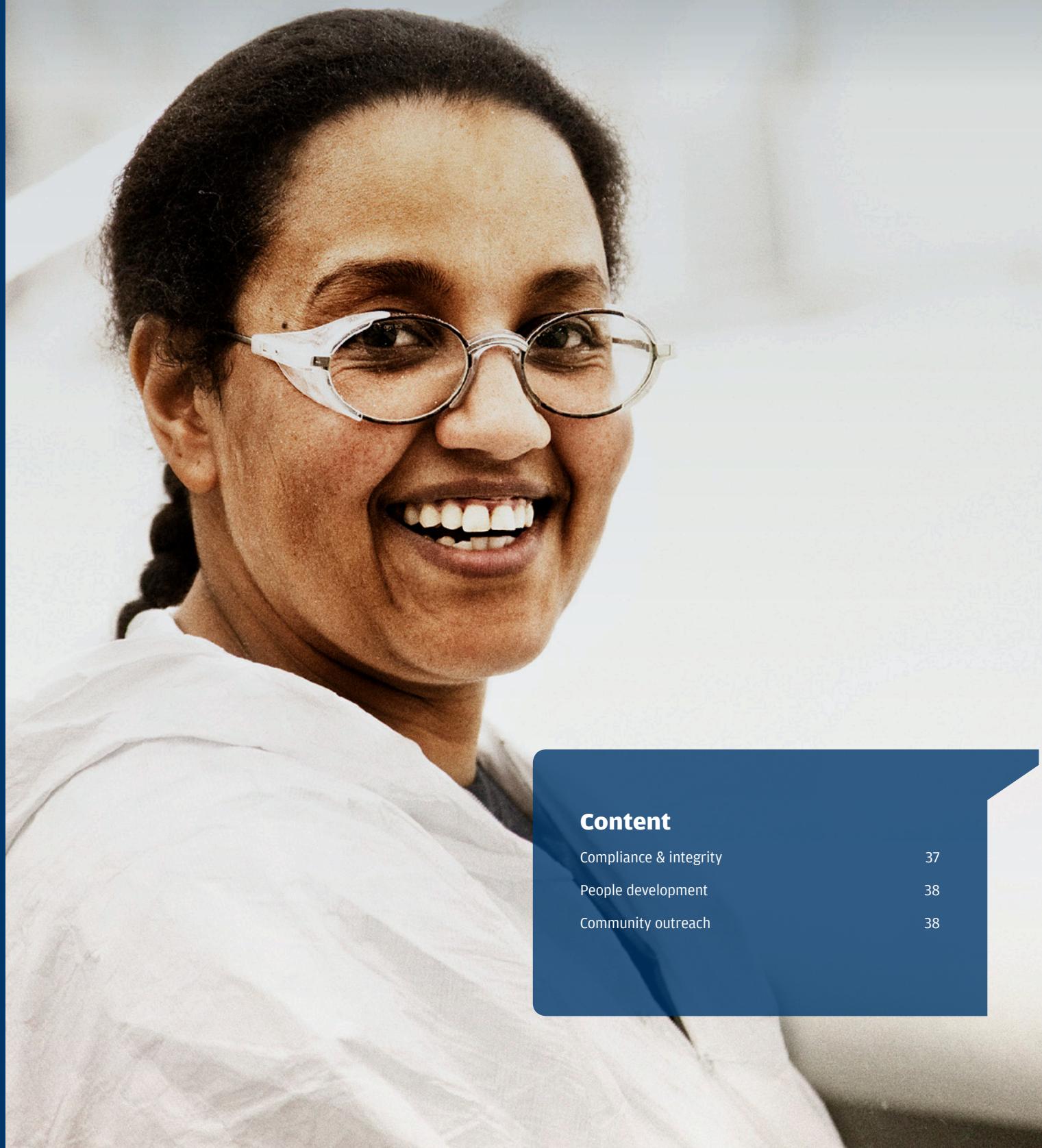
In LM Wind Power factories, we manufacture large structures in composite materials. There are significant risks to manage from the necessary movements of objects and people in the manufacturing workspace to potential effects caused by air

quality or chemical exposure. The improvements we have made are reflected in safety metrics, such as the Lost Time Accident (LTA) rate per million work hours, where LM Wind Power is now performing at the highest industry standards. The LTA rate for 2014 was on target at 2.0, down from 2.7 the year before. The most frequent type of accidents and health effects relate to trips and falls and ergonomic strains. Efforts will continue to minimize work related risks and to eliminate accidents, aiming for an ambitious, lower global LTA rate of 1.6 in 2015.

#### Lost Time Accident rate



# People & Community



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## LM Wind Power is a diverse, global company with 26 different nationalities employed

The company encourages diversity at all levels and the Code of Conduct clearly states that we hire and treat our employees in a manner that doesn't discriminate with regard to gender, race, religion, age, disability, sexual orientation, nationality, political opinion, union affiliation, social or ethnic origin.

As in many manufacturing and engineering companies, our gender split shows a predominance of male employees at 86% of the total workforce. Looking at salaried employees in isolation, the gender split is 25% female and 75% male. It is the aim of LM Wind Power to improve gender and other forms of diversity in the business, further building on the existing practices of promoting talents through individual performance and career reviews as part of the company's Performance Management Process.

In 2014, the company completed a structured organization and people review of all salaried employees, looking at capabilities and mobility as part of a new Human Resource strategy, 'Get, Keep, Grow'. We see diversity as key for ensuring a long term, sustainable management solution, and gender is one aspect that we are looking at when developing and building the strongest possible, global team at all levels.

At the management level, LM Wind Power set a target to further promote gender diversity in its highest governance body, the Supervisory Board. In 2014, this body consisted of

the Chairman, who is a representative of our owners Doughty Hanson, and three members who are also in the executive management team of LM Wind Power. They are all male. The company has set a target to have one female member of the Supervisory Board by 2017. The Board did not progress toward this target in 2014 as generally, new members of the Board are not considered unless specifically requested by our owners and that as yet, has not happened. The topic of how to increase the representation of women on the Board, and in general in the company, remains high on the priorities of the VP Global Communications & Human Resources and his team and there will be plans with targets established during the coming year.

LM Wind Power is committed to offering all employees equal career and employment opportunities. LM Wind Power's Management Team (9 people) currently consists of five different nationalities - Dutch, Danish, British, Spanish and American - all are male.

The percentage of contractors as opposed to permanent employees remained stable in 2014 around 10.5%.

See detailed employment data in Appendix 1.

# 86%

male employees and  
14% female employees

## **Employment conditions**

LM Wind Power acknowledges freedom of association as a fundamental right and employs people worldwide according to local law and collective bargaining agreements where required. The unions are particularly well represented in countries such as Brazil, Spain, Denmark, Canada and India where 25-90% of our employees are covered by collective bargaining agreements. This applies primarily to the hourly paid employees. The number of weeks' notice typically provided to employees in relation to significant operational changes are governed by local regulations in all the areas where we operate. When no local legislation or agreements exist, the general guidance provided in our employee handbook is a minimum of two weeks. LM Wind Power has not identified any violations or risks of violations of the right to freedom of association in its operations nor with suppliers in the reporting period.

## **Compliance & integrity**

Our responsibility to respect human rights and observe ethical labor practices, act as safe workplaces, promote non-discrimination, and ensure equal opportunities is the cornerstone of our Code of Conduct. Through this we express our support for protecting internationally proclaimed human rights, ensure that we do not allow human rights abuses and condemn any kind of discrimination.

This commitment is reflected in our HR processes for recruitment, promotion and remuneration which is based on equal pay for equal work; as well as in our zero-tolerance policy for forced or child labor, for discrimination or any other misconduct, at both LM Wind Power and supplier sites. Almost half of our employees are employed in China and India and we have many young applicants. We have a clear policy that we do not hire people under the age of 18 and applicants have to show their ID card or birth certificate as part of the recruitment process. LM Wind Power has not identified any instances of child labor in its operations nor with suppliers in the reporting period.

## **Incidents of discrimination**

There were four instances of discrimination and harassment cases reported worldwide in 2014, all initiated by employees. One was settled after mutual agreement and three went to court where the ruling was in favor of the company. We have clear internal guidance and processes for handling of discrimination and harassment claims and always conduct a thorough investigation, where applicable with involvement from the union representatives to ensure workers' rights.

## **Incidents of corruption**

LM Wind Power operates in many countries where the occurrence of corruption in general is relatively high. We have not yet systematically assessed all locations for corruption risk but plans are being discussed to improve this. We have, over the

# **4**

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## **incidents of discrimination and harrassment in 2014**

# **0**

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## **incidents of reported corruption**

years, gained significant experience with doing business in many different parts of the world. China, India and most recently Brazil are some of the countries where we are aware of the potential increased risk of corruption.

To the best of our knowledge, we have not had any cases of corruption, although we have experienced situations where it was clearly indicated to be helpful to further a process, make a deal, or get goods through customs. We have clear internal rules and guidelines, described in the Code of Conduct, and expect all employees to fully comply, even though this may sometimes lead to inconvenience, delays or even lost business.

There was a single issue of fraud in Brazil which was investigated and resolved by our Internal Audit and Risk department, among others. In connection with the investigation, the topic of Corruption and Bribery was raised with all managers and LM Wind Power do Brasil was selected as pilot entity to roll out a SpeakUP line - an externally hosted whistleblower mechanism. This went live in 2015.

Since 2012, LM Wind Power has trained all salaried employees in the Code of Conduct, anti-corruption and UK Anti-Bribery Act aligned with our commitment to the UN Global Compact principles. All new salaried employees go through this e-learning program.

In 2014, a new round of re-certification was initiated for a large but limited selection of functions (Finance, Global Operations, Quality & HSE, Sales & Marketing and Sourcing) identified to be in higher risk of potentially being faced with corruption and bribery issues. It is expected that all employees will go through re certification in 2015. Additional face-to-face high-level training has already been provided for plant management in China by the VP, Global Communications & HR in person.

### **People development**

At the heart of people development is the newly launched Human Resources strategy 'Get, Keep, Grow'. Our success comes from the creativity, skills and expertise of our people and we continuously invest in developing their competences. Our culture is one of high performance and the environment can be fast paced to keep up with the changes in the market. Within that context, we work to create a stimulating and empowering working environment that enables personal initiative and innovative thinking.

We nurture a culture in which development is very much embedded in the day-to-day work and the feedback we give and receive. We also provide training, especially to the employees working in our manufacturing facilities who need to follow our global processes, detailed work instructions, operate equipment and tools and be vigilant around quality and HSE.

For the salaried employees in staff functions, the framework for our development activities is based on the 70-20-10 model. 70 refers to the proportion of development that comes from focused efforts to provide opportunities for people to grow through exposure to challenging tasks in the day-to-day job; 20 refers to the proportion of development that comes from feedback and support given to and provided by others; and 10

refers to the proportion of learning and development that comes from formal training and courses.

LM Wind Power is a highly dynamic organization and we have a culture that values initiative and drive. Our people solve challenging tasks every day. When they have reached their potential in one area and need new challenges, we do what we can to give them new opportunities, exposing them to new tasks, colleagues or cultures. Many colleagues have been expatriated for shorter or longer assignments as part of their development. Examples include people who have gone from India to the US to run a factory, or from the Netherlands to China to head up Finance.

We see significant value in combining personal development successfully with company objectives. Allowing people to expand their perspective and step out of their comfort zone is not only an investment in their personal motivation and job satisfaction, it keeps our talent in the organization longer, increases understanding across the business and creates better results.

Development activities are captured in LM Wind Power's Performance Management System, which follows a cycle of annual objective setting, performance review and development



planning. In 2014, 1269 employees out of 5040 at the time of counting were covered by this system, which has been in place since 2007 and it now represents almost the entire salaried population. We are in the process of implementing performance reviews for hourly paid employees in many locations as well and expect to report on the status in the 2015 report.

### **Training**

The data on training provided to the employees is not available split by gender. Overall, the hours for training differed considerably across job functions and years, reflecting the situation in the specific plant and specific focus areas at the time of reporting. Generally, training has high priority for both hourly paid and salaried employees. In some cases, a fairly high number of hours spent on training can also reflect a low activity level at the plant, as the local management takes the opportunity to upgrade peoples' skills instead of sending them home. The detailed overview of training hours provided for each location in 2014 can be found in Appendix 2. The types of training conducted for the hourly paid employees focus specifically on production related aspects such as health and safety, Lean Practices and 5S, Quality Management, Continuous Improvement and operation of equipment in the manufacturing processes.

Other types of training include language skills, project management and leadership training. A detailed list of the training conducted in the reporting period can be found in Appendix 3.

### **Community outreach**

LM Wind Power's plants and offices around the world operate primarily in dedicated industrial areas and under all applicable local laws and regulations. None of them are assessed to have any significant negative impact on the local communities. Waste, emissions and other impacts from the plants' activities are managed actively, in accordance with our global HSE Management System and local regulations. And the employment

and economic development following the establishment of a plant is highly valued. Community engagement is generally local and ad hoc but thriving nonetheless. Some locations, however, such as Dobaspet and Little Rock have dedicated teams to identify, prioritize and manage community activities. They do this with a view to corporate values, issues of high local profile and, if possible, with a connection to our industry or business.

The execution of LM Wind Power's sustainability approach in certain locations, especially in India, is extraordinary. It serves as an example of a business where the needs of citizens and communities carry weight like the demands of shareholders, and where community activities are integrated into running a profitable business through programs that are expanded year after year. While providing valuable employment and people development, plant management continuously prioritize and plan for advancements on social and environmental issues, improving the living conditions of local people. LM Wind Power's plant is located in Dobaspet, an area primarily characterized by low income employment with the most highly qualified and skilled workers commuting to Bangalore for work. LM Wind Power deploys a very active policy of primarily hiring employees and contractors from the local area, with free transportation provided to and from work. 90% of the employees come from villages within 25km of the plant and more than 900 local people are employed directly and indirectly, spurring development in the wider community.

As in previous years, efforts in 2014 once again focused very much on education and welfare with activities ranging from food donations, blood drives, sponsorships of under privileged schools and students, sports activities, medical check-ups and safety training for employees' families. The global level of activity was even higher than in previous years, not least due to the strong inspiration from the Indian plant.

<b>Year</b>	<b>Charitable donations</b>	<b>Community work (Employee hours provided)</b>
2014	75,812	12,155
2013	63,335	3,127
2012	20,000	N/A
2011	55,234	1,184
2010	62,360	2,472



**Caption:**

LM Wind Power's VP Global Operations Richard Bevan and India Head of Operations, Niraj Bisaria, inaugurated the new building at the local Dobaspet Government School.

## Room to learn

Over 300 children now have more space to study, thanks to LM Wind Power's Dobaspet plant in India.

“When we saw this school and understood that they required a good classroom for children, we decided to construct a building for the school.”  
~ **Phani Shankar Krishnamurthy**, Senior Maintenance Manager in LM Wind Power's Dobaspet plant.

The construction of the new classroom began in August 2014 and one month later, the plant held an inauguration ceremony with students, their families and the surrounding community to celebrate the project's completion.

Giving back to the community is nothing new for our Indian plant which has a strong focus on children and education. In addition to constructing the

classroom, the Dobaspet employees have led a variety of initiatives in collaboration with local government schools – such as improving school infrastructure, donating furniture and books, and even teaching in the schools during their free time.

With 90 percent of employees coming from villages within 25 km of the plant, engaging in community activities allows LM Wind Power India to impact both employees and the general public.

“We have a wide ranging sustainability or Corporate Social Responsibility (CSR) program here and education is the prime area where we can contribute to society, since government alone is not able to do all that is needed,” Krishnamurthy said. “We believe that developing a good environment for a child will have a large impact on his career and on society.”

# Technology & innovation

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The rotor is the ‘motor’ of a wind turbine, capturing the wind and converting it into rotation which powers the generator

Our product is the most obvious example of our sustainability proposition, as a core component on the wind turbine that extracts the energy from wind. Over the years, we have launched several enhanced designs of lighter and longer blades that are even more effective and we continue to boost and develop our designs and manufacturing processes to increase output and reduce cost. Simply put, we strive to make the most efficient and reliable rotor blades at the lowest possible price.

Five new blade types, all longer than 52 meters, were launched in 2014, as well as several innovations that include a low weight, carbon hybrid blade, noise reducing blade add-ons, leading edge erosion protection, de-icing technology and intelligent monitoring systems based on radio technology. All these new developments will further improve the competitiveness of wind power through boosting performance, or reducing downtime and cost of maintenance.

A few examples of our technology developments in 2014 that contribute to the long term sustainability of wind power:

- A more sustainable and low cost version of infusion polyester successfully used to produce a blade.
- Development of a hybrid carbon technology, which enables longer and lighter blades at a competitive cost compared to full carbon blades. This product will be particularly interesting for offshore application, where blade length and performance can make a big difference to the business case.
- Leading edge de-icing technology developed and tested full-scale and in the field. By heating the blade's leading edge to melt ice, the system for de-icing boosts the output from the wind turbines, further increasing the competitiveness of wind power in cold climates. The technology will allow a wind farm to increase its power generation by 5-7% on average, with an increase as high as 20% for some specific turbines.
- Leading edge erosion protection launched commercially, offering even better protection of the blades and securing Annual Energy Production. ProBlade™ has a clear aerodynamic advantage over tape which is the most commonly used form of leading edge protection technology.
- Noise serrations developed and tested. These features help address one of the challenges for the expansion of wind power, namely the resistance to have them installed close to residential areas due to noise.

## **Improved production environment**

While developing and launching new technologies, we also had a firm eye on quality improvements and implementing more sustainable material solutions or more cost effective processes in manufacturing. The quality improvement initiatives led to progress on key metrics. Thus, the cost of quality issues compared to sales decreased, as did the number of customer findings during inspections, which were at an all-time low level. Overall, quality performance is moving in the right direction, which was also evident in the feedback from our customers during the year. Customer satisfaction ratings improved generally and we were also recognized as Supplier of the Year by key global customers in India and China.

In the blade design and manufacturing area, two of the most significant sustainability improvements in 2014 were the substitution of PVC foam with PET and the testing of a styrene free resin and gelcoat system in our mold production.

PET is used on some of the blade components and has a better environmental footprint and lower cost than PVC. Our supplier is in the process of switching to 100% recycled PET, an initiative that we welcome. In 2015, we will implement more PET-based material in our processes, further improving the environmental performance of LM Wind Power blades.

“Styrene reduction has always been an area of focus for our sustainability activities, as it is an important component in some of our raw materials in the manufacturing process with suspected potential to cause harm to employees if not handled correctly. We fully accept that while we have set and try to adhere to the highest standards, we need to constantly scrutinize our processes, work environment training and protection measures.”

## **5**

### **new blade types longer than 52 meters introduced**

We are determined to do anything possible to understand and manage the risks in our business better and at the same time we have pioneered alternative solutions. We already introduced low styrene gel coat in our global operations some years ago, which we developed with a key supplier. Such innovations are now available widely to all manufacturers using similar materials.

The testing of styrene free resin and gelcoat systems in 2014 supports our ambition to further minimize any risk from styrene exposure, ideally creating a styrene free production environment. This will benefit the employees who will experience improved working conditions and can potentially also bring savings through elimination of the need for some personal protective equipment and ventilation in work spaces.

Our blades produce green energy every day, enabling millions of people and businesses to be more sustainable and offering part of the solution to some of the world's most pressing challenges.

# 2014 Sustainability performance at a glance

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## SAFETY & QUALITY

**98.5%**

---

of suppliers covered by Supplier Quality Agreements up from 93% the previous year

**82%**

---

reduction in material non-compliance rate compared to previous year

**65%**

---

decrease in Lost Time Accident rate since 2011

**440**

---

supervisors/team leaders went through safety excellence training in 2014

## TECHNOLOGY

**5**

---

new blade types longer than 52 meters introduced



---

Substitution of PVC with recycled PET

**5+**

---

material and technology innovations that significantly boost Annual Energy Production (AEP) and reliability

# 2014 Sustainability performance at a glance

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## ENVIRONMENT

**21%**

---

decrease in total energy consumption since 2012 despite increasing production levels

**23%**

---

reduction in water consumption since 2012



---

Lower carbon footprint per kg blade produced, breaking the carbon footprint curve despite increased production levels

**3.6**

---

ideas per employee implemented against the target of 2

**4.3ms**

---

EUR 4.3ms in waste reduction savings against target of EUR 2.7m

## PEOPLE

**0**

---

incidents of reported corruption

**4**

---

incidents of reported discrimination and harassment



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Global plant leadership development training launched



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Record high amount spent on charitable donations



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Record high number of employee hours spent on community work

# GRI G4 content index



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G4-21	List of material aspects, their boundaries and significance to stakeholders:	18, 19, 20			No
G4-22	About this report	5			No
G4-23	About this report	5			No

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## Category: Environmental - Continued

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G4-EN 23	Material use, Energy, Waste and Water Waste	26	8		
<b>Aspect: Transport</b>					
G4-EN 30	Data not available	N/A	8	Although we recognize that transport of our products and the material that goes into them is material, we are not able to report on the impact yet as we have prioritized mapping our own direct impact first. We are moving towards a full Life Cycle Assessment approach in which transport would be included, but have no fixed timeline yet. We expect this to happen within the next three years.	
<b>Aspect: Supplier environmental assessment</b>					
G4-EN 32	Stakeholder engagement Supplier dialogue is key to success	16	8		
G4-EN 33	Stakeholder engagement Supplier dialogue is key to success	16	8		

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# Appendix



# Appendix 1

## a) Total number of employees by employment contract and gender:

2012:

Blue collar (female): 358, (7% of total)  
Blue collar (male): 3461, (71%)  
White collar (female): 264, (5%)  
White collar (male): 773, (16%)

**Total: 4856**

2013:

Blue collar (female): 377, (7%)  
Blue collar (male): 3231, (67%)  
White collar (female): 248, (5%)  
White collar (male): 745, (15%)  
Blue collar (unknown gender): 242,  
White collar (unknown gender): 1,

**Total: 4844**

2014:

Blue collar (female): 422  
Blue collar (male): 3331  
White collar (female): 259  
White collar (male): 747  
Blue collar (Unknown gender): 220  
White collar (Unknown gender): 14

**Total:**

## b) Total number of permanent employees by employment type and gender:

2012:

Females on fixed-term contracts: 191,  
Females on permanent contract: 431,  
Males on fixed-term contracts: 2001,  
Males on permanent contracts: 2233,  
**Total: 4856**

2013:

Females on fixed-term contracts: 136,  
Females on permanent contract: 489,  
Males on fixed-term contracts: 1671,  
Males on permanent contracts: 2305,  
Unknown on fixed-term contracts: 239,  
Unknown on permanent contracts: 4,  
**Total: 4844**

2014:

Females on fixed-term contracts: 174,  
Females on permanent contract: 491,  
Males on fixed-term contracts: 1819,  
Males on permanent contracts: 2220,  
Unknown on fixed-term contracts: 178,  
Unknown on permanent contracts: 32,  
**Total: 4914**

## c) Total workforce by employees and supervised workers and by gender: Exact figures

2012:

Female employees: 575,  
Female managers: 47,  
Male employees: 3939,  
Male managers: 295,

**Total: 4856**

2013:

Female employees: 579,  
Female managers: 46,  
Male employees: 3680,  
Male managers: 296,  
Unknown employees: 243,

**Total: 4844**

2014:

Female employees: 630  
Female managers: 51  
Male employees: 3773  
Male managers: 305

**Total 4993 (including contractors and trainees)**

## d) Total workforce by region and gender: Exact figures

2012:

China (Female): 128, China (Male): 1401, Total: 1529  
Europe (Female): 328, Europe (Male): 1452, Total: 1780  
India (Female): 19, India (Male): 844, Total: 863  
USA (Female): 147, USA (Male): 537, Total: 684

**Total: 4856**

2013:

China (Female): 103, China (Male): 1214, Total: 1317  
Europe (Female): 278, Europe (Male): 1137, Unknown: 14,  
Total: 1429  
India (Female): 19, India (Male): 808, Total: 827  
USA (Female): 225, USA (Male): 817, Unknown: 229, Total:  
1271

**Total: 4844**

2014:

China (female): 129, China (male): 1376, Unknown: 33, Total:  
1538  
Europe (female): 270, Europe (Male): 1044, Unknown: 19,  
Total: 1333  
India (Female): 28, India (Male): 773, Unknown: 6, Total:  
807  
USA+CAN (Female): 254, USA+CAN (Male): Unknown: 176,  
886, Total: 1316  
**Total: 4993**

**e) Percentage of the contractors compared to the entire workforce: Exact figures**

2012:

Contractors: 192,

Permanent employees: 4664,

**Total: 4856 - 4% of the total workforce**

2013:

Contractors: 461,

Permanent employees: 4383,

**Total: 4844 - 10% of the total workforce**

2014

Contractors:

Permanent employees:

**Total: 4953 - 10.5% of total workforce**

No significant variations in employment numbers.

NB: Numbers do not include Brazil as it was not possible to get reliable employment data for 2014.

Brazil will be included in the 2015 reporting and going forward.

## Appendix 2

**The average hours of training that the organization's employees have undertaken during the reporting period, by Gender, Employee Category**

DK Functions:

- 2012: On average 44.25 hours of training per employee per year, 2.66% of the total working hours - only white collar employees.
- 2013: On average 12 hours of training per employee per year, 0.73% of the total working hours - only white collar employees
- 2014: On average 15 hours of training per employee this year

ASV - DK:

- 2012: For BC and WC training amounted to average 4.87 hours per employee per year, 0.25% of the total working hours.
- 2013: For BC and WC training amounted to average 185 hours per employee per year due to lower productions, 9.62% of the total working hours.
- 2014: For WC, training amounted to an average of 72 hours per employee, 3.8% of the total working hours
- 2014: For BC, training amounted to an average of 23 hours of training per employee, 1.8% of the total working hours

China region:

- 2012: Training directed towards BC amounted to an average 20 hours per year, 0.88% of the total working hours.
- 2012: Training directed towards WC amounted to an average 29 hours per year, 0.17% of the total working hours.
- 2013: Training directed towards BC amounted to an average 55 hours per year, 2.41% of the total working hours.
- 2013: Training directed towards BC amounted to an average 46 hours per year, 0.29% of the total working hours.
- 2014: Training directed towards BC amounted to an average 49 hours per year, 2.16% of the total working hours.
- 2014: Training directed towards WC amounted to an average 37 hours per year, 0.21% of the total working hours.

Bangalore:

- 2012: On average 32.89 hours of training per employee per year, 1.56% of the total working hours - only white collar employees.
- 2013: On average 35.62 hours of training per employee per year, 1.69% of the total working hours - only white collar employees.
- 2014: On average 26.91 hours of training per employee per year

Dobaspet:

- 2012: On average 4.25% training of the total working hours amounting to 91.5 hours in average per employee. Approx 85% for BC and 15% for WC
- 2013: On average 3.8% training of the total working hours amounting to 82.3 hours in average per employee. Approx 85% for BC and 15% for WC
- 2014: On average 2.5% training of the total working hours amounting to 45 hours on average per employee. Approx 85% for and 15% for WC

Ponferrada:

- 2012: Training directed towards WC amounted to average 86 hours per year, 4.89% of the total working hours.
- 2012: Training directed towards BC amounted to average 13.95 hours per year, 0.79% of the total working hours.
- 2013: Training directed towards WC amounted to average 104.46 hours per year, 5.94% of the total working hours.
- 2013: Training directed towards BC amounted to average 26.31 hours per year, 1.49% of the total working hours.
- 2014: Training directed towards WC amounted to average 50.16 hours per year, 2% of the total working hours.
- 2014: Training directed towards WC amounted to average 14.09 hours per year, 0.83% of the total working hours

Castellon:

- 2014: Training directed towards WC amounted to average 9.29 hours per year, 0.53% of the total working hours.
- 2014: Training directed towards BC amounted to average 12.06 hours per year, 0.69% of the total working hours.

## Appendix 3

### Grand Forks and Little Rock US:

- 2012: In average 60 hours of training per Blue collar employee per year.
- 2012: In average 40 hours of training per White collar employee per year.
- 2013: In average 60 hours of training per Blue collar employee per year.
- 2013: In average 40 hours of training per White collar employee per year.
- 2014:
  - An average Qualified Blue Collar employee goes through 198 hours of training their first full year
  - An average Qualified Blue Collar employee goes through 10 hours of refresher training each year thereafter
  - An average Certified Blue Collar employee goes through 228 hours of training their first full year
  - An average Certified Blue Collar employee goes through 10 hours of refresher training each year thereafter
  - An average White Collar employee goes through 60 hours of training each year

### Gaspé Canada:

- 2012: In average 80 hours of training per Blue collar employee per year.
- 2012: In average 40 hours of training per White collar employee per year.
- 2013: In average 40 hours of training per Blue collar employee per year.
- 2013: In average 20 hours of training per White collar employee per year.
- 2014: In average 120 hours of training per Blue collar employee per year.
- 2014: In average 80 hours of training per Blue collar employee per year

No data for The Netherlands

a = The type and scope of programs implemented and assistance provided to upgrade employee skills.

b = The transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.

#### **a) Type and scope of programs:**

Calibration  
French  
SHL certification  
International transport  
HSE training  
Skill Matrix  
Technical training  
Blade wagon training  
Documentation  
LEAN  
IT  
Welding courses  
Truck and crane courses.  
English (China region)  
Training for common skills such as presentation, communication and IT skills  
Six Sigma Green Belt (WC)  
Project Management (WC)  
Coaching (WC)  
Leadership in Practice (WC)  
Change Management (WC)  
Quality (WC)  
Continuous Improvement (WC)  
Regulatory statutory requirement  
Production training  
5S  
Operator qualifications  
Certification training  
First aid training  
Fire fighting  
Basic NDT  
On job training  
Engineering changing communication to shape  
7QC tools for BC  
Customer training on AC

#### **b) Transition assistance programs:**

Exit interviews  
Pension plan  
Pension interviews  
Assistance with CV and cover letter

## Appendix 4

Memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: holds a position on the governance body, participates in projects or committees, provides substantive funding beyond routine membership dues, views memberships as strategic

2012:

Extreme Materials  
NextRotor  
Overcoming Critical Aeroelastic Design Challenges of Wind Turbines  
Smartwind  
Plastindustrien i Danmark  
Dansk Industri  
EWEA  
Vindmølleforeningen i Danmark  
Business Kolding  
Innovatorium Herning  
Netværk for fagdirektører og funktionschefer  
Fag- og emnenetværk indenfor HSE

2013:

Blade King  
NextRotor  
Overcoming Critical Aeroelastic Design Challenges of Wind Turbines  
Smartwind  
Avatar  
iRotor  
Plastindustrien i Danmark  
Dansk Industri  
EWEA  
Vindmølleforeningen i Danmark  
Business Kolding  
Innovatorium Herning  
Netværk for fagdirektører og funktionschefer  
Fag- og emnenetværk indenfor HSE

2014:

Plastindustrien i Danmark  
Dansk Industri  
EWEA  
Vindmølleforeningen i Danmark  
Business Kolding  
Innovatorium Herning  
Netværk for fagdirektører og funktionschefer  
Fag- og emnenetværk indenfor HSE

To the best of our knowledge there have not been any political donations taking place in 2014

## Appendix 5

Suppliers by Commodity	Suppliers who signed the SQM requiring Code of Conduct compliance 2013 (In %)	Suppliers who signed the SQM requiring Code of Conduct compliance 2014 (in %)
Core	95.45	100
Glass	70	100
Liquids	64	100
Metals	75	100
Plastics	76	92.3

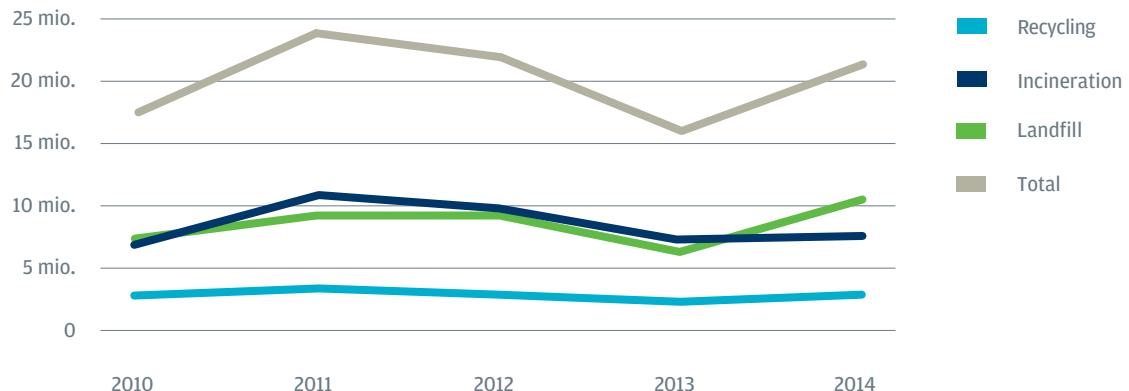
## Appendix 6

Year	Blades produced	Year	Raw materials (tons)
2014	8,262	2014	65,758
2013	7,173	2013	59,097
2012	8,856	2012	93,135
2011	10,333	2011	69,078
2010	10,241	2010	64,374

Year	Energy consumption in operations (MJ)	Year	Electricity for production equipment, lights and ventilation (MJ)
2014	595,021,985	2014	347,974,598
2013	635,722,624	2013	288,631,814
2012	752,211,102	2012	348,598,869
2011	-	2011	-
2010	-	2010	-

### Appendix 6



## Appendix 6 - Continued

Material use kg



Energy consumption MJ



## Appendix 7



Year	Total waste in Kg
2014	21,259,860
2013	16,204,841
2012	22,214,878
2011	23,739,012
2010	17,458,369

Year	Kg
2014	2,934,211
2013	2,441,165
2012	3,197,926
2011	3,447,561
2010	2,944,314



Year	Kg
2014	7,709,643
2013	7,399,263
2012	9,758,177
2011	11,002,297
2010	7,132,316

Year	Kg
2014	10,616,006
2013	6,364,413
2012	9,258,775
2011	9,289,154
2010	7,381,739

## Appendix 7 – Continued

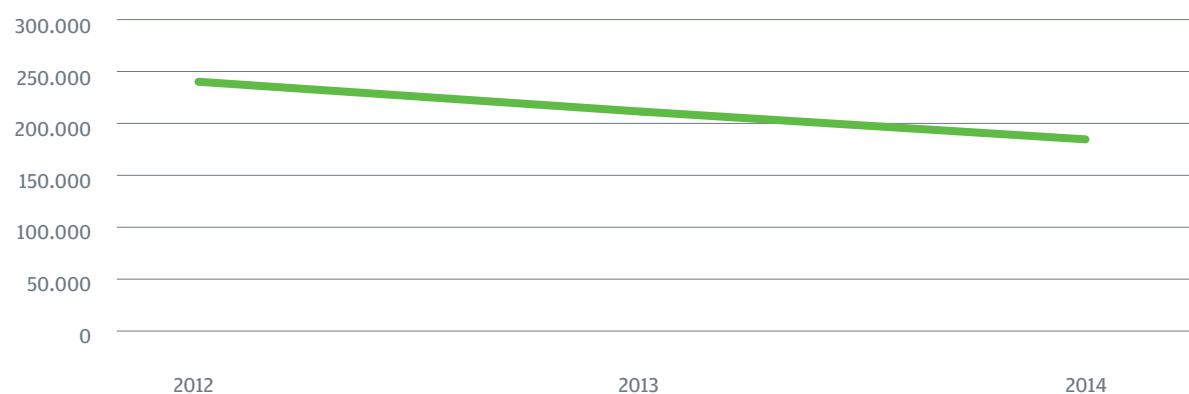
Year	Water use (m <sup>3</sup> )
2014	184,863
2013	210,790**
2012	238,782
2011	-
2010	-

Year	Ground water/municipal water (m <sup>3</sup> )
2014	143,069
2013	173,340
2012	188,721
2011	-
2010	-

Year	Water use, on site (m <sup>3</sup> )
2014	41,794
2013	37,450
2012	50,061
2011	-
2010	-

Year	India water recycling/reuse (%)
2014	23
2013	18
2012	18
2011	-
2010	-

Water m<sup>3</sup>



Year	Carbon Footprint per kg blade
2014	6.5
2013	6.9
2012	8.0*
2011	7.4
2010	5.4

Year	Blades produced
2014	8,262
2013	7,173
2012	8,856
2011	10,333
2010	10,241

## Appendix 7 - Continued

Carbon footprint per MW blade produced



No. of blades produced



## Appendix 8

Year	Absentee rates, salaried employees	Absentee rates, hourly paid employees
2014	0.6	1.3
2013	0.5	1.2
2012	0.7	1.5
2011	-	-
2010	-	-

Year	Number of safety dialogues conducted by senior management and employees
2014	5,414
2013	2,496
2012	-
2011	-
2010	-

## Appendix 9

<b>Year</b>	<b>Employees trained in anti-corruption policies and procedures</b>	<b>Year</b>	<b>Percentage of employees receiving regular performance reviews</b>
2014	23	2014	25.2
2013	20	2013	21.4
2012	23	2012	20.2
2011	23	2011	-
2010	15	2010	-

<b>Year</b>	<b>Charitable donations</b>	<b>Year</b>	<b>Community work (Employee hours provided)</b>
2014	75,812	2014	12,155
2013	63,335	2013	3,127
2012	20,000	2012	N/A
2011	55,234	2011	1,184
2010	62,360	2010	2,472