

# 15 YEARS OF THE WORLD WIND ENERGY ASSOCIATION



*Uniting the World of Wind Energy Since 2001*

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This year was the 14th anniversary of the establishment of the World Wind Energy Association (WWEA). In the past, almost 15 years, the global wind energy community has reached remarkable achievements. Under the leadership of the WWEA Board, the management of the WWEA head office, the active support from the WWEA members and in cooperation with many governments and other international renewable energy organizations, WWEA follows the purpose of the association: providing an exchange platform for professionals in the field of wind energy, providing technical support and consulting services to national governments and related international organizations, promoting international technical exchange and transfer, and making contributions to the healthy development of the global wind energy sector.

Nowadays, in order to fundamentally solve the problem of fossil energy pollution and greenhouse gas emissions, the whole world has entered a new period of energy transformation. This transformation implies the development from high carbon to low carbon, from low efficiency to high efficiency, from local equilibrium to cross national boundaries. Harmony between energy and politics, economy, society and environment is getting more important, and there is more focus on the overall development of centralized and decentralized clean energy systems. This paradigm shift will bring great changes to energy consumption, energy supply, energy technology and energy systems in general, this is a real energy revolution: The world's energy supply will see a fundamental transformation in changing

from fossil energy to clean renewable energy. As one green and carbon-free renewable energy, wind energy will be an important driving force for the sustainable development of the world.

In this October, the 14th World Wind Energy Conference (WWEC2015) will be held in Israel, I sincerely wish the conference a complete success, and wish that the World Wind Energy Association will make new contributions to the global energy transformation, under the leadership of the new WWEA Board.

**Prof. He Dexin**  
**WWEA President**



# 04 Welcome by the Secretary General

Since the foundation of WWEA in the year 2001, a lot has happened and the world has changed: Wind energy is today part of the mainstream power supply, with currently around 400 Gigawatt of wind turbines, supplying already more than 4% of the global power needs. More than 100 countries are using wind power for commercial purposes, and, in parallel, other renewable technologies have made astonishing progress as well.

So there are good reasons today for a confident statement: **The world is on its way towards a 100 % renewable energy supply!** This development is now not only happening more or less in a hidden way, like in the past two to three decades. Since WWEA, together with other partners, launched the Global 100 % Renewable Energy campaign in 2013, the global Energiewende - energy transition towards renewables - is now discussed globally and officially. All major international environmental NGOs have agreed on 100% renewable energy as the way to go. The G7 decided a couple of months ago to completely phase out fossil fuels within this century. Many smaller and major companies have agreed to switch their energy supply to renewables. And hundreds or even thousands of communities and municipalities have set 100 % targets, many of them have already reached it.

**We can say proudly: WWEA has an impact on how the world develops.** WWEA has been able to change the international agenda. The first major milestone was the foundation of IRENA in 2009, the second is the

ongoing global debate about how and when to reach 100 % renewable energy. In particular the wind industry will benefit from this debate as it will demonstrate that wind as a fluctuating energy source can well be complemented by other renewables plus storage and smart grid options.



**The next big challenge will be the focus on the decentralized aspects of the global energy transition.** Renewable energies by nature are offered in a decentralized way, and they need to be harvested in decentralized way. This provides a special key role for local communities, in particular in the so called developing world. It will be a key task for WWEA to highlight the role of these communities who are already playing vital roles in many countries - and to make sure that they can play their role also in the future, even on a much larger scale. Again here, wind power will especially benefit from a stronger focus on communities: In some parts of the world, there is opposition against wind turbines, and the proven means against such opposition is ownership and involvement.

In this sense: WWEA has still a lot of work to do. We look forward to continuing this work together with you, based on your support!

**Stefan Gsänger**  
**WWEA Secretary General**

## WORLD WIND ENERGY ASSOCIATION WWEA

The World Wind Energy Association WWEA  
 initiated at July 1, 2001 in Copenhagen  
 by national Wind Energy Associations from the different continents  
 will follow five working principles.

1. Wind energy shall serve as one cornerstone and driving force for the immediate implementation of the world energy system driven by renewable energies to completely substitute fossil and nuclear sources.
2. Global dissemination of grid connected and stand alone wind energy solutions should rely on experience gained from the most successful implementation strategies, based on favourable legal, political and social framework conditions as initiated by national associations. Local and rural communities and people should be involved and should benefit directly.
3. WWEA shall stimulate and back the foundation of national and regional wind energy associations and encourage national governments to set ambitious targets and political frameworks for priority strategies in favour of a fast and sustainable development of all renewable energies.
4. WWEA will organize World Wind Energy Conferences and further international events for mobilizing a wide range of the different wind energy applications.
5. WWEA will play an active role in the World Council for Renewable Energies in order to work for a full substitution of all polluting and hazardous waste causing energies.

Copenhagen, July 1, 2001

Austrian Wind Energy Association IGW

Brazilian Wind Energy Association

German Wind Energy Association BWE

Egyptian Wind Energy Association

Europe Denmark

Norwegian Wind Energy Association

Japan Wind Energy Association

South African Wind Energy Association

The initiating members elected Dr. Preben Møgaard as founding President of WWEA.

# The Foundation of the WWEA

WWEA was founded in Copenhagen on the 1 July 2001. During a party the night before for an 80-year-old spiritual leader I had called Heinrich Bartelt, then Managing Director of BWE, the German Wind Energy Association. I wanted to tell him that when the following day we had a gathering in Copenhagen, for the participants it was not sufficient simply to express their support to the first World Wind Energy Conference. It was scheduled to be held in Berlin in 2002. I was convinced that they had an expectation of something more: It could be the foundation of a worldwide association for wind energy in particular to give the countries outside USA and Europe a voice. Heinrich suggested that at the gathering I should present the idea of an international wind energy association.

The initiative for the first WWEC came from a circle around Hermann Scheer, president of EUROSOLAR; Peter Ahmels, President of BWE; Peter Helm, director of WIP; and Wolfgang Palz, Director of EU Renewable Energy Research Section. It had a very understandable background. During the 1990s, Germany had become the world's major wind power nation. Year after year, with 2'000 to 3'000 MW new installed capacity, Germany did more than any other country. German wind turbine manufacturers had success with their innovative design in fierce competition with well established manufacturers especially from Denmark and now ready to present their products for sale on the world markets.

However, it soon turned out, that with modest international support for the planned Berlin conference it hardly could be called a world conference.

So I was asked by the promoters if I would involve Folkecenter's quite comprehensive international network of wind energy pioneers to ensure their support to the WWEC 2002.

The following days we had our gatherings in Copenhagen. Within a few hours the statutory draft of the WWEA was finished at the Bella Center, a convention hall where an EWEA conference took place. It was agreed that the president of EWEA was the first who should receive the decision on creation of a WWEA. I was designated as the one to brief him about the new world wind energy association. This I accepted on the condition that to emphasize the global nature of the new association I needed the escort by representatives from at least two continents. The professors Galal Osman from Africa and Everaldo Feitosa from South America did not hesitate.

We explained that wind energy organisations in several countries on four continents, including two of the world's largest countries, supported the new wind energy association. The members included countries that could look forward to become major wind power nations. Therefore they had an obvious need for an organization that was responsible for their specific interests in the international arena.

From this moment the WWEA was a public reality. Subsequently we held a quickly called press conference. Together with Professor Frede Hvelplund, I told the lone representative of the press, Lynn Harrison from Windpower Monthly, that WWEA had been founded during the weekend. Her



question mostly what we thought of ourselves to have the audacity to create a rival association to the dominant European and American wind energy associations. Firstly there was the general freedom to form new organisations, we explained. Now they required seats in the governing body of a wind energy association.

WWEA was a reality, which the founders celebrated at an outdoor dinner in a cozy square in central Copenhagen. During the conference days the foundation of the WWEA had become known and several new and important members joined. However, already on the second day one of the European co-founders got cold feet and left the WWEA. Others denounced the new association.

Since its establishment in July 2001 WWEA has invited industry representatives, students, researchers and other interested to annual World Wind Energy Conferences and Exhibitions. Here they have the opportunity to exchange information on scientific and technical advancements, initiate new partnerships and discuss recent trends in the wind energy industry. Over the past ten years, WWECs have attracted more than 10'000 attendees from over 90 countries. They are held in a different country each year and organised in cooperation with local partners and supported by regional and international wind energy companies and government agencies.

The concept and the association has proven to be robust and well thought out. Purpose, statutes and structure are the same. Activities are more diverse. The founding member organisations are basically the same

and new members constantly registered. During WWEA's first decade two presidents have been at the head of the organisation. Till 2005 I had the privilege of being its president; thereafter Dr. Anil Kane took over.

Sometimes the creating of new associations and organisations are discussed and prepared for weeks or months and even years. The World Wind Energy Association was proposed and founded in the course of a weekend. At the 14 years anniversary it is evident that WWEA has proven to be extremely vigorous and a recognized leader in the world.

### **Dr. Preben Maegaard**

#### **Director of the Folkecenter for Renewable Energy**

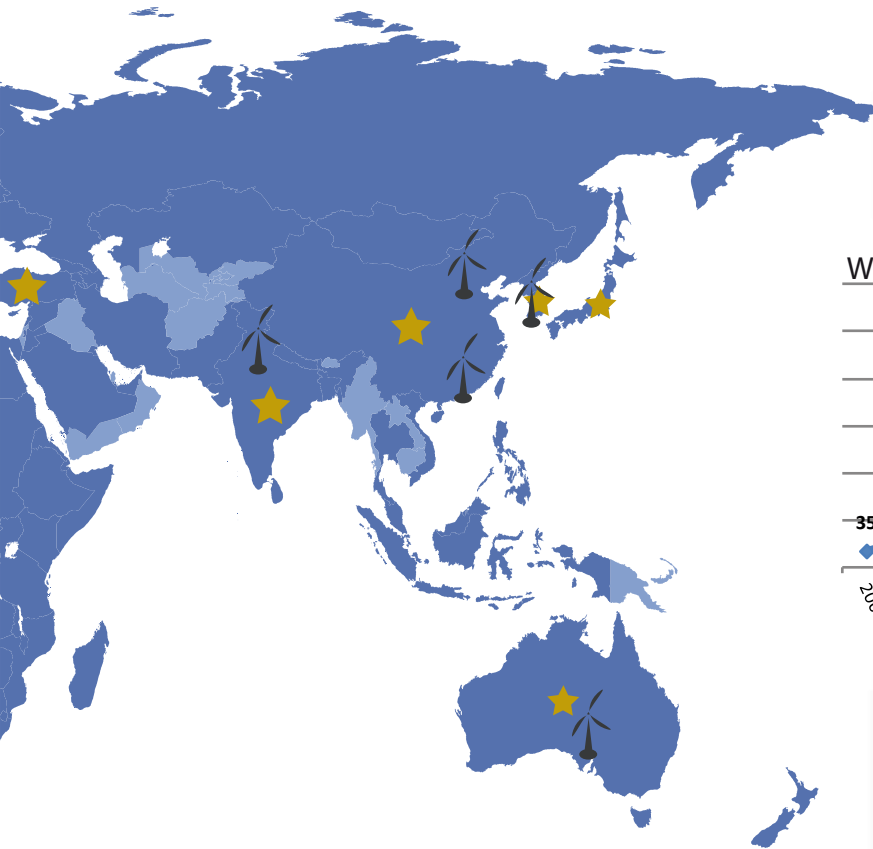


13 World Wind Energy Conferences have attracted more than 12'000 attendees from over 90 countries

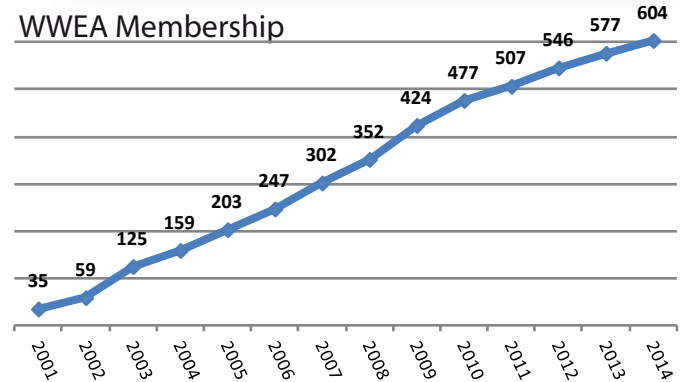
Over 200'000 people visits WWEA's website with more than 300'000 information requests processed in a year

- 
- WWEA's Head Office
  - ★ Country of Origin of the WWEA Board Members as of 30 september 2015
  - Countries with WWEA Members
  - 🌪 World Wind Energy Conferences





More than 600 members from more than 100 countries on all continents



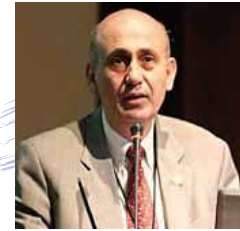
WWEA yearbook "Wind Energy International" has become the international standard yearbook: four editions and more than 4'000 copies sold since 2005.



WWEA President  
Prof. He Dexin  
China



Prof. Chuichi Arakawa  
Japan  
Vice-President



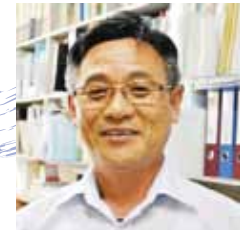
Prof. Dr. Tanay Uyar  
Turkey  
Vice-President



Prof. Dr. Conrado Moreno  
Cuba  
Vice-President



Prof. Dr. Galal Osman  
Egypt  
Vice-President



Prof. Dr. Choong-Yul Son  
South Korea  
Vice-President



Heinrich Bartelt  
Germany  
Vice-President



Prof. Dr. Everaldo Feitosa  
Brazil  
Vice-President



Volker Thomsen  
Canada  
Vice President &  
Treasurer



K. Kasthoorirangaian  
India  
Vice-President



Dr. Ibrahim Togola  
Mali  
Vice-President

**Honorary Vice-Presidents:**

Prof. Dr. Erico Spinadel, Argentina  
Air Marshall (rtd) Shahid Hamid, Pakistan

**Former Vice-Presidents:**

Grigori Dmitriev, Russia  
Sarvesh Kumar, India  
Yukimaru Shimizu, Japan  
Hermann Oelsner, South Africa



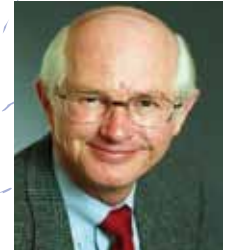
President Emeritus  
Dr. Preben Maegaard  
Denmark



President Emeritus  
Dr. Anil Kane  
India



Director Commercial Activities  
Heinz L. Dahl  
Australia



USA Representative  
Paul Gipe



International Solar Energy  
Society  
Prof. Dr. Dieter Holm



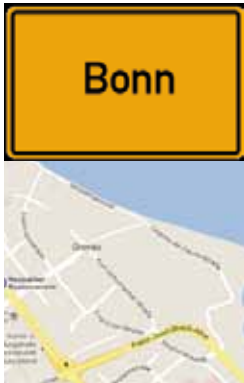
International Association for  
Wind Engineering  
Prof. Yukio Tamura



Chair Technical Committee  
Dr. Jami Hossain  
India



CIS Countries Rep.  
Andrei Konechenkov  
Ukraine



Secretary General  
Stefan Gsänger



Marketing & Development  
Manager  
Jean-Daniel Pitteloud



Membership & Publications  
Officer  
Martina Hinkova



#### Past employees:

- Pavel Stroev (Belarus)  
Webmaster, 2002–2005
- Marc-Antoine Renaud (Canada)  
PR & Marketing Officer, 2008-2009
- Zhiyan Song (China)  
PR & Marketing Officer, 2009-2011
- Frank Rehmet (Germany)  
Membership & Publications Director  
2004-2013

Daisuke Hayashi (Japan/USA), May-June 2004  
Diego Aguilera (Colombia/Denmark), June-Aug 2004  
Vikas Godara (Australia), Oct-Nov 2004  
Gyula Bodnar (Hungary), Dec 2004 - Jan 2005  
Crystal Hultao Zou (China/Germany), Mar-Apr 2005  
Atuhaire Rodgers (Uganda), June-July 2005  
Tony Okpokam (Nigeria), June 2005  
Victor Massita (Kenya/Namibia), July 2005  
Jeff Chao-Yang Tsao (Taiwan/China), Aug 2005  
Anne Kuhl (Germany), Aug-Sept 2005  
Luke Evenbom (USA/Sweden), Jan-June 2006  
Daniel Maerevoet (Germany), Mar-Apr 2006  
Luciano Hauschildt (Brazil), May- July 2006  
Jamie Graham (USA/France), July-Sept 2006  
Han Xiaochong (China), Oct 2006  
Stuart Thomson (UK), Jan-Mar 2007  
Aimee Wilson (USA), June-Aug 2007  
Cristina Lim-Memedovski (Philippines/Germany), Sept 2007 - Feb 2008  
Lori Borgal (Canada), Aug- Dec 2008  
Jessica Klein (Germany), Aug 2008-Mar 2009  
Dita Hoskova (Czech Republic), Feb-Apr 2009  
Martina Argerich (Argentina), Apr-July 2009  
Jason Selfe (USA), June-Aug 2009  
Simone Parravicini (Italy), Dec 2009- Feb 2010  
Xin Yuan (China), Mar-Jun 2010  
Fabian Musall (Germany), Apr 2010  
Carey Neill (USA), Apr-May 2010

Yongli Wang (China), May-June 2010  
Sarah Martin (Canada), May-July 2010  
Elisa Seidt (Germany), Aug 2010 - Feb 2011  
Martina Bachvarova (Bulgaria), Aug 2010 - May 2011  
Alina Ciofirla (Romania), Aug 2010-June 2011  
Jean Pitteloud (Venezuela/Switzerland), Nov 2010 -Apr 2011  
Xu Weiyi (China, Netherlands), Mar-June 2011  
Tom Du (Canada), May-July 2011  
Alina Prokopenko (Russia), July 2011- July 2012  
Kristina Kirschbauer (Germany), August-October 2011  
Brooke Stanislawski (USA), August-September 2011  
Peter Zhang (Canada), October 2011- March 2012  
Salliana Fondo (Cameroon), February - March 2012  
Wesley Lien (USA/Taiwan), August - September 2012  
Reina Maeda (Japan), October 2012 - January 2013  
Daniel Suck (Germany), January - June 2013  
Sohaib Malek (Pakistan), March - July 2013  
Pedro Cornejo (Peru), March - September 2013  
Paul-Jean Couthenx (France), April - July 2013  
Markus Hintzen (Germany), October 2013 - January 2014  
Jean-Philippe Bernier (Canada), October - December 2013  
Fadi Kabbany (Syria), August 2014  
Nopenyo Dabla (Togo), November 2014 - March 2015  
Clément Gaudin (France), March - June 2015  
Christian Tigges (USA), June - August 2015  
Carlo Schick (Germany), August - October 2015



## **2001: The Founding of WWEA**

In 2001, a number of high profile research institutes and national wind energy associations gathered to found the World Wind Energy Association (WWEA). WWEA founding members include the national wind power associations of Australia, Austria, Brazil, Egypt, Germany, India, Japan, Norway, and South Africa as well as research institutes from South Korea and Russia. Professor Everaldo Feitosa of the Brazilian Wind Energy Association supports the foundation with enthusiasm, noting: "Up to now our membership in different wind energy associations hasn't brought us any considerable results. Just the few weeks of WWEC preparation, however, brought us an excellent exchange of experience. Within the community of international wind energy associations we feel much more independent in preparing the introduction of wind energy in our countries independent of any company interests."

Hermann Oelsner from the African Wind Energy Association (AfriWEA) has also been an enthusiastic supporter of the WWEA. "During the preparatory meeting of the 1st World Wind Energy Conference in Berlin we felt like an equal partner of the wind energy community for the first time in many years. It will not help us simply to apply certain systems and concepts from industrialised nations in our countries. Especially in today's pioneering phase we have specific problems and questions in South Africa and we want to be taken seriously."

One year after its establishment in July 2001, WWEA organised its first annual World Wind Energy Conference in 2002. Since then, WWEA's annual World Wind Energy Conference and Exhibition have become a meeting point for the world of wind energy, for entrepreneurs, scientists, politicians, students, and everybody else who is involved in wind power.



## 1st World Wind Energy Conference

The first World Wind Energy Conference sought to mobilise a wide range of different wind energy actors and activists, with 600 delegates from 60 countries.

In the manifesto "A Global Strategy for Wind Energy", the conference formulated the basic conditions for the world-wide proliferation of wind energy. The WWEC2002 identified practical, technical and legislative barriers, which eventually slow down the worldwide use of wind energy generation. Nine strategic cornerstones for the world-wide proliferation of wind energy were presented as well and the WWEC called for the establishment of IRENA.



## World Wind Energy Award 2002

The first World Wind Energy Award honoured the work of Prof. Amin Mobarak from Egypt, for making Egypt the leader country in the Mena region.

Since the late 1970's, Prof. Mobarak was one of the first and main pioneers of wind power in Egypt and he was instrumental in making the country the leading wind energy country in Africa and the Arab world.



# WWEC2003: Cape Town, South Africa

## 2nd World Wind Energy Conference

Organised in partnership with the African Wind Energy Association, the WWEC2003 was attended by more than 400 participants. The conference focused on defining strategies for the implementation of renewable energy systems for developing countries. The WWEC2003 resolution called upon the WTO to amend its laws and that world trade laws must not restrain the proliferation of wind energy and renewables in general. It was also stated that development programs must focus on the establishment of local renewable energy industries. The WWEC2003 also suggested to introduce an additional Kyoto mechanism focusing on renewable energy implementation. During the event, the South African government announced the ratification of its White Paper for renewable energy.



## World Wind Energy Award 2003

In 2003, the award went to Indian wind turbine producer Suzlon, headed by founder, chairman and managing director Tulsi Tanti. Starting in 1995 with only 20 workers, the company has become one of the world's leading turbine suppliers. Today, Suzlon is patronised by hundreds of customers across the world, from small, middle and big size companies, multinational corporate agencies, private and public sector enterprises, community ownership and even individuals. After the acquisition of German REpower, Suzlon ranks third among the leading wind power equipment manufacturers in 2010.



# SUZLON

## 3rd World Wind Energy Conference

The WWEC2004 in Beijing was the biggest wind energy event ever held outside Europe and North America, with more than 1000 delegates and more than 3000 visitors at the accompanying WWEC exhibition, amongst them high-level government representatives from all continents. The event expressed strong support for the development of Renewable Energy in China and gave a decisive impetus for making China the leading wind energy nation in the world few years later.

On the occasion of the WWEC2004, the first draft "Sustainability and Due Diligence Guidelines" were presented to the public for discussion.

### World Wind Energy Award 2004

Jürgen Trittin and Dr. Herman Scheer jointly received the award. Serving as Germany's Minister for the Environment, Nature Conservation and Nuclear Safety from 1998 to 2005, Trittin played a key role for Germany's Nuclear Phase-Out Programme. He was an enthusiastic supporter of Germany's Feed-In Tariff Law, which was adopted in 2000.

Winner of the Right Livelihood Award, President of Eurosolar, General Manager of the World Council for Renewable Energy (WCRE) and member of the German Parliament, Hermann Scheer was one of the most influential figures in the international renewable energy movement: He passed away unexpectedly in October 2010. Throughout his professional career he was

dedicated to elaborating policy concepts for renewable energy dissemination and was responsible for numerous legislative energy frameworks in the European Union and worldwide. He has also been recognised as the founding father of IRENA.

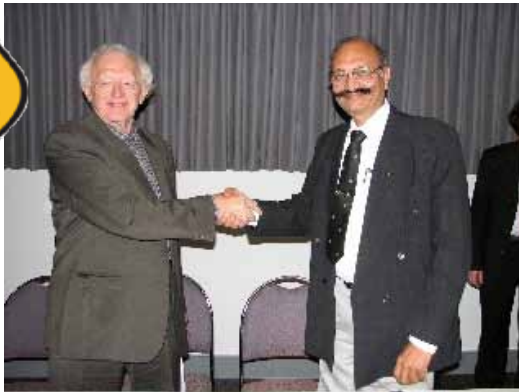
*Jürgen Trittin: „Receiving the World Wind Energy Award in 2004 together with Hermann Scheer was, in my eyes, recognition of our success in promoting Germany's highly effective system of support for renewable energy in the rest of the world. I was especially pleased that the presentation of the award took place in China, because I could already see the first signs that China was beginning to move very strongly into renewable energy.“*

The Honorary Award went to the Chinese Wind Energy Association and Prof. He Dexin.



## 4th World Wind Energy Conference

The WWEC2005 was attended by more than 300 delegates. The WWEC2005 resolution focused on two main topics for the future of renewable energy: the combination of the different renewable energy sources and the importance of technology transfer. The conference also expressed confidence that wind energy generation will achieve the 2020 targets as presented by the International Energy Agency well prior to 2020. During the WWEC2005, the government of Victoria announced to extend its support scheme for renewable energy in spite of the lack of support on the national level.



## World Wind Energy Award 2005

The 2005 award went to Hon. Vilas Muttemwar, Former Minister for Non-Conventional Energy Sources and Dr. Pramod Deo, Chairperson of the Maharashtra Central Electricity Regulatory Commission.

Hon. Vilas Muttemwar and his Ministry were honoured for driving India to the top four wind energy generating nations in the world. The energy expert Dr. Pramod Deo strongly promoted the utilisation of decentralised energy generation units, renewable energy sources and captive power.

Dr. Anil Kane elected as WWEA President, succeeding Dr. Preben Maegaard



## 5th World Wind Energy Conference

More than 900 delegates attended WWEC2006 and listened to his Excellency, the President of India, Dr. Abdul Kalam who inaugurated the event stating: „*The crying need therefore is to look for renewable energy that alone can ensure sustainable development.*“ He called for „*a comprehensive renewable energy policy with mandatory and time-bound provisions is an urgent need of the hour.*“

The WWEC2006 resolution recognised the worldwide challenge of capacity building and the creating awareness for energy independence and the need for institutional networking towards that end. The conference welcomed the decision of the International Geothermal Association to join the REN Alliance, now comprising four major international renewable associations. The Conference also welcomed the development of a Memorandum of Agreement with the International Association for Wind Engineering IAWE and looked forward to close cooperation in the achievement of our mutual objectives.



## World Wind Energy Award 2006

In 2006, the award went to the Chinese company Goldwind, represented by its CEO Mr. Wu Gang. In 2006, Goldwind achieved a domestic market share of 33% and was ranked Nr. 10 globally based on annual installed capacity. Five years later, Goldwind is among the five largest wind turbine manufacturers in the world.





## 6th World Wind Energy Conference

600 delegates attended the WWEC2007 in Argentina. The conference touched a wide range of topics linked to such obstacles and future challenges for wind power in Latin America, one major challenge being the establishment of domestic wind industries and manufacturing capacities within the region. The worldwide shortage of wind turbines affected the region heavily because only little manufacturing capacities were set up in Latin America. The conference also underlined the need to take into account the key role of renewable energies and to create the long-term frameworks for their full deployment for the success of the Post-Kyoto arrangements and goals on mitigation of climate change.

### World Wind Energy Award 2007

The 2007 award went to the key persons behind the Brazilian Renewable Energy Programme PROINFA, which started the development of wind energy utilisation in Brazil, the leading wind energy country in Latin America. The PROINFA programme was unique in setting a 60% local content provision for Brazilian wind farms. This requirement has led to the creation of a major domestic wind industry.

The Award was given to the Hon. Ms Dilma Vana Rousseff, Ms Laura Porto, Mr. Valter Luiz Cardeal, Dr. Sebastião Florentino da Silva. As Minister of Energy, Dilma Rousseff was responsible for elaborating the national energy plan. Five years later, in 2010, Hon. Ms Dilma Rousseff was elected as

President of Brazil.

The Honorary Award went to the Secretary for Environment of Buenos Aires Province.



## 7th World Wind Energy Conference

### Community Power: Energy Autonomy for Local Economies

WWEC2008 focused on the special topic of Community Power, referring to the development and ownership of renewable energy projects by local communities including farmers and landowners, cooperatives, Aboriginal Groups, municipalities, utilities, educational institutions and other partners. More than 900 participants discussed all aspects of such community based ownership models in more than 100 presentations and a special series of workshops on how to build a community wind farm.

The conference proposed a Green Energy Act for Ontario, presented at the conference to the Energy Minister of the Province of Ontario and Deputy Premier, Hon. George Smitherman who took the initiative up.

### World Wind Energy Award 2008

The seventh award went to Ms Jane Kruse, Dr. Preben Maegaard and Paul Gipe as the pioneers in community wind power in Europe and in North America. Paul, Jane and Preben started working with renewable energy in the 1970s. They have advised numerous governments about how to implement wind energy, based on the idea of broad social involvement and community ownership, in order not only to increase the social acceptance of wind farms, but also to achieve real participation of as many people as possible.

Paul Gipe: *"Sharing the World Wind Energy Award 2008 with my good colleagues Preben Maegaard and Jane Kruse of the Folkecenter for Renewable Energy was one of the highlights of my career. The award for our work documenting the success of community-owned renewable energy development in Denmark and Germany helped put "Community Power" on the international agenda. Until our award in 2008, wind energy in particular was seen worldwide as solely the domain of utility companies and their private-sector brethren. The award recognized that there is another way, another path to renewable energy development, one that shares the promise of profiting from renewable energy with the people who have to live with it."*

The Honorary Award 2009 went to the government of the Province of Ontario, Canada.





## 8th World Wind Energy Conference

### Wind Power for Islands – Offshore and Onshore

The WWEC2009 was attended by more than 600 participants and focused on wind energy utilisation on islands as well as around islands: offshore applications as well as hybrid and stand-alone systems. Both are key technologies for the shift towards a future global energy supply based on 100 % renewable energy. Renewable energy hybrid systems were identified to play a future key role in providing electricity for islands which often possess an abundance of wind and other renewable resources. Such technologies are also increasingly important for rural electrification in remote or unserved areas.

The WWEC2009 also welcomed that the World Bioenergy Association joined the REN Alliance so that all the major world technology associations are working closely together.

### World Wind Energy Award 2009

The eighth award went to George Smitherman, Minister of Energy and Infrastructure for the province of Ontario. Under his political responsibility and leadership, Ontario's Green Energy and Economy Act was passed in September 2009. The Act is the first feed-in law in North America and encouraged investment in renewable energy production by providing businesses the ability to sell energy produced from renewable sources to the

province's electricity grid at a fixed price. An important part of the Act is the explicit recognition and empowerment of community power, that is individual citizens, municipalities, cooperatives, farmers and aboriginal communities. For these investors, a special premium has been provided.

The Honorary Award went to the Governor of Jeju Province, Mr KimTae-Hwan.



## 9th World Wind Energy Conference

### Large Scale Integration of Wind Power

Main topic of the WWEC2010 was how to integrate large capacities of wind power into existing grid infrastructure and how to adjust grid capacities. Turkey with 80 GW wind projects waiting for permission is an excellent example for the corresponding challenges and opportunities. Integration of wind power was discussed as an important condition for a transformation of the energy supply towards 100 % renewable energy.

WWEC2010 was attended by more than 400 delegates and additional 1000 visitors at the exhibition. The Conference endorsed the proposal of a Global Feed-in Tariff programme in order to expand appropriate national, regional and international financing mechanisms for the exclusive realisation of renewable energy.



### World Wind Energy Award 2010

The Award went to the founding member states of the International Renewable Energy Agency IRENA being represented by IRENA's Interim Director General, Ms Hélène Pélosse. The founding of IRENA sent out a very strong signal to the world community that renewable energy will have to play and will play a key role in the future energy supply all over the world. WWEA as one of these initiators and strongest proponents of IRENA since its own foundation in 2001 expressed its strong commitment to continue and extend its close cooperation with IRENA.



## 10th World Wind Energy Conference

### Green Energy: Converting Deserts into Powerhouses

The WWEC2011 had a special focus on how to harvest the abundance of renewable energy in the deserts of this world and thus Convert Deserts into Powerhouses. The conference aimed at presenting, exchanging and discussing the latest knowledge on the state of wind energy utilization, turbine technologies, and renewable energies in general, local and regional energy planning.

More than 500 delegates from all over the world attended the WWEC2011.

## World Wind Energy Award 2011

The Award went to Sewedy Wind Energy Group SWEG under the leadership of Mr Ahmed El Sewedy. With the Award, the World Wind Energy Association recognized the company's leading role in introducing wind power on a large scale in Egypt, the MENA region and in Africa.



# WWEC 2011

10<sup>th</sup> World Wind & Renewable Energies Exhibition  
المؤتمر الدولي العاشر لطاقة الرياح ومعرض الطاقات المتجددة

## 11th World Wind Energy Conference

### Community Power - Citizens' Power

The WWEC2012 was hosted by WWEA and BWE at a time which has brought “Energiewende” – the transformation of the energy system towards renewable energy – on the top of the political agenda and in the focus of public attention. The conference programme consisted of 40 sessions with side events organized together with international leading organizations like IRENA, Deutsche Welle and the World Future Council.

The Conference urged especially the German Government and the European Union to continue the successful policy frameworks like in particular the feed-in legislation and to develop a comprehensive long-term strategy that includes community power and local integration of renewable energies as key components.

500 delegates from 45 countries attended the WWEC2012.



### World Wind Energy Award 2012

The Award went to the Hepburn Community Wind Farm (Victoria, Australia) and its initiators for establishing the first and groundbreaking community initiative in Australia that led to a community owned wind farm, an excellent answer in particular in order to increase social understanding, distribution of benefits and acceptance of wind power.



## 12th World Wind Energy Conference

### Opening Doors for Caribbean Wind

560 participants from 42 countries attended the WVEC2013 organized by WWEA and CETER in Havana. The conference was held under the special focus on how to accelerate the deployment of wind power in the Caribbean region.

The conference encouraged all Governments in the Caribbean, Central and Latin America to remove the barriers to renewable use in the region and develop a comprehensive long-term strategy that includes community power and local integration of renewable energies as key components.

The Global 100% Renewable Energy Campaign was launched during the event.



### World Wind Energy Award 2013

The Award went to the French wind turbine manufacturer Vergnet Eolien for the capacity showed to adapt wind technology to the necessities of millions of people, in rural areas and in the areas of developing countries.

A Special Recognition was given to Dr. Fidel Castro and Prof. Dr. Conrado Moreno Figueredo for their political respectively academic achievements related to wind energy in Cuba and the Region.





## 13th World Wind Energy Conference

### Distributed Wind Power - Matching Generation and Demand

The WWEC2014 was held in parallel with the 8th China (Shanghai) International Wind Energy Exhibition. The main theme was Distributed Wind Power and the role it can play to accelerate the deployment of wind power in the world.

The 500 participants from 40 countries applauded the Chinese government for having taken important steps in order to reduce this dependence on polluting fossil resources. The conference also encouraged the Governments of China, of all Asian countries and beyond, to remove the barriers to renewable energy use in the region and develop a comprehensive long-term strategy that includes distributed wind power as well as local integration of renewable energies as key components.



### World Wind Energy Award 2014

The Award went to Dr. Anil Kane as one of the pioneers of wind power in India, Asia and worldwide.



## 2001

Foundation of the WWEA in Copenhagen on the 1 July 2001.

## 2002

WWEA organized its first annual World Wind Energy Conference in Berlin in July 2002.

## 2003

During the 2nd World Wind Energy Conference in Cape Town in 2003 the South African Government presented, after years of discussion and delay, the White Paper for Renewable Energy, and WWEA recommended the introduction of a feed-in tariff in order to tap the great potentials of wind energy in the country.

## 2004

More than 300 guests from around the world attended the opening ceremony of WWEA's Head Office in Bonn on 1 June 2004.

The International Renewable Energy Alliance (REN Alliance) was founded during the Bonn International Renewable Energy Conference Renewables2004.

As the first government, the government of Pakistan declared support for creation of IRENA during the WWEC2004.

China adopted its first Renewable Energy Law in 2005 as a consequence of the WWEC 2004 in Beijing. Based on this legislation, China became in the following years the leading wind energy country worldwide.

## 2005

WWEA officially launched the "Sustainability and Due Diligence Guidelines" for companies, public authorities and all other parties involved in the wind energy sector, setting clear standards for a strong growth of the wind industry.

Being a strong advocate of feed-in tariffs, WWEA was pleased to announce that Turkey introduced a Renewable Energy Law including a feed-in tariff.

WWEA launched the Small Wind and Hybrid Systems Working Group, comprising members from all continents.

WWEA launched the first edition of its yearbook, Wind Energy International 2005/2006. In the following years, the yearbook has become a basic source of information for all those dealing professionally with wind energy. In the first edition, the book included 65 country reports, and 45 special reports.

## 2006

WWEA, in association with the Indian Wind Energy Association InWEA, noted the strong endorsement given to the development of renewable energy including wind power by His Excellency the President of India, Dr Abdul Kalam. In the opening of the conference, the President said: "The crying need therefore is to look for renewable energy that alone can ensure sustainable development." It was the first time that a head of state expressed such deep support to renewable energy.

The International Geothermal Association joined the REN Alliance.

WWEA launched a new technology education website ([www.world-wind-energy.info](http://www.world-wind-energy.info)), accessible by anyone and free of charge.

## 2007



WWEA obtained Special Consultative Status at the United Nations.

One of the most important consequences of WWEC2007 in Mar del Plata, Argentina, was that it started the GENREN tender, launched by Her Excellency the President of Argentina, Cristina Kirchner on a Feed In Basis, with 754 MW wind energy assumed to start partially operating grid connected by the end of 2011.

The second edition of WWEA yearbook Wind Energy International was released.

## 2008

The Ukrainian Parliament adopted a feed-in tariff as the first CIS country, paving the way for renewable energy generation in the country.

WWEC2008 in Kingston, Canada, is the first ever international event fully dedicated on community power. As a result, the first feed-in law in North America was adopted a couple of months later: Ontario's Green Energy and Economy Act, North America's first comprehensive guaranteed pricing structure for renewable electricity production with the world's first special incentive scheme for community power.

## 2009

The International Renewable Energy Agency IRENA was founded in Bonn on 26 January. At the Founding Conference, 75 States sign the Agency's Statute.

The Community Power Working Group of WWEA was launched during the eighth WWEC on the Jeju Island, South Korea.

South Africa's National Energy Regulator announced the introduction of a

system of feed-in tariffs. The tariffs for wind energy and concentrating solar power are among the most attractive worldwide.

The International Bioenergy Association joined the REN Alliance in June, which now comprises five international organisations representing bioenergy, geothermal, solar, hydropower and wind technologies.

WWEA published its annual report on the worldwide development of installation capacity: The World Wind Energy Report 2008, published in several languages, gets downloaded 70'000 times.

The third edition of Wind Energy International 2009/2010 was published in June.

For the first time, WWEA's proposal for a Global Feed-in Tariffs (FIT) was discussed at the UN Climate Change Conference COP15 in Copenhagen. A number of other international organizations took the basic idea up and presented similar proposals.

## 2010

WWEA organised the first World Summit for Small Wind, in Husum, Germany, the first international event especially focusing on small wind turbines. Participants from all over the world discussed matters of international certification of small wind turbines and the status of international markets.

## 2011

The members of WWEA's Community Power working group, representing all continents, agreed on the a definition of Community Power in order to give clear guidance to policymakers as well as to others involved in renewable energy and the general public. They agreed on the potential of Community Power to further accelerate the deployment of wind and other renewable energy technologies.

Pakistan announced its first Feed-in tariff programme for wind energy.

## 2012

WWEA launched the WWEA Quarterly Bulletin and published the first Small Wind World Report during the 3rd WSSW in Husum. Also, on the same occasion, WWEA Small Wind was officially founded with the purpose of giving more strength and support to the small wind industry.

## 2013

The Global 100% Renewable Energy Campaign was launched by a diverse group of global organisations with the aim to inspire change by highlighting and visualizing a 100% renewable energy future.

WWEA formed the CIS Committee in order to improve cooperation amongst wind proponents in this region.

The first multilaterally financed feed-in tariff programme, GET FiT Uganda, was started, inspired by an idea developed by WWEA.

## 2014

WWEA re-launched its homepage and added new content and additional functions.

The World Wind Resource Assessment Report was presented, estimating the global wind potential at more than 100 TW.

CAN International, the most important international network of environmental NGOs, adopted the 100 % renewable energy target which was later also discussed officially by governments during the COP20 in Lima. The COP20 Presidency branded the related WBA/WWEA Side Event as "Lima Climate Action Highlight".

## 2015

Greenpeace International presented it first global 100 % renewable energy scenario, inspired by WWEA's Global 100% RE campaign.

## REN Alliance

The International Renewable Energy Alliance (REN Alliance) was formed during the Bonn 2004 International Renewable Energy Conference, and was established to advance policy and information on renewable energy by providing a combined voice for renewable energy technology and practice.

The REN Alliance bridges the gap between policy and practice by building on the synergy of its partner organisations to achieve progress through their collective experience and knowledge. The partners comprise international organisations representing bioenergy, geothermal, solar, water and wind technologies.

The REN Alliance's goal is to advance policies that favour the increased deployment and use of renewable energy by fostering collaboration, removing barriers, promoting successful implementation strategies, enhancing business conditions and developing markets. This goal is to be reached by the provision of reliable and up-to-date information for improved decision making at all levels of policy, for a secure supply of clean energy through sustainable development.

The REN Alliance builds linkages through common interests within the renewable energy community and related policy bodies. As such, it is open to collaborate with all relevant agencies and networks with similar

objectives. As an example, the International Renewable Energy Agency and REN Alliance, representing technology and practice, have agreed to work together to accelerate the scaling up of renewable energy deployment worldwide.

The REN Alliance comprises five member organizations.



Besides WWEA, the International Hydropower Association (IHA) is one of the founding members of REN Alliance. IHA is a non-profit international organisation founded in 1995 under the auspices of UNESCO. The mission of IHA is to be the global organisation advancing hydropower's role in meeting the world's water and energy needs. It has consultative status with several UN bodies, and works in partnership with various governments, financial agencies and civil-society organisations. IHA is also involved in work to assess water-energy interrelationships, evaluate greenhouse gas footprints, investigate financial models, monitor markets, and report on levels of deployment.

The International Solar Energy Society (ISES) is also one of three founding members. Since 1954, ISES has been actively engaged in advancing the science, technology, policy and education needed for the efficient use of renewable energy and practical applications. ISES represents thousands of scientists, technical experts, industry delegates and related professionals.

The International Geothermal Association, with more than 3'500 members in over 64 countries, joined REN Alliance in 2006. The IGA has a special consultative status with the Economic and Social Council of the United Nations and is a Partner of the European Union in their Campaign for Take Off (CTO) for the promotion of renewable energy. IGA is the owner of the company IGA Service GmbH that undertakes work on contract to advan-

ce the aims of the Association.

The latest organisation to join REN Alliance in 2009 is the World Bioenergy Association (WBA). Since its foundation in 2009, the WBA has been working to address a number of pressing issues including certification, sustainability, standardisation, bioenergy promotion, and the debates about bioenergy's impact on food, land-use and water supplies.



# Global 100% RE Campaign

The transition from fossil fuels to renewable energy is inevitable. It will happen whether we take action or not. Fossil fuels are—by definition—finite. They are a one-time gift to humanity. Long before they are economically exhausted, we will have turned away from them toward renewable sources of energy simply on the basis of cost. The question, then, is do we make this transition from fossil fuels to renewable energy on our own terms, in ways that maximize the benefits to us today and to future generations, or do we turn our heads away and suffer the economic and social shocks that rising prices and market volatility will create—as it has done so often in the past.

Despite this basic logic, most of humanity so far has taken measures nowhere near proportional to the problem. One fundamental necessity to breaking the inertia is a robust, global campaign for 100% renewable energy.

The intention of Global 100%RE is to connect the fragmented dots of renewable energy advocates worldwide to build a global 100% renewable energy

alliance, proving that being powered by 100% sustainable renewable energy is urgent and achievable. Hereby this unique campaign builds on initiatives that already take place on national, regional and local level. The overall goal is to up the debate on renewable energy towards 100% RE as the new normal as well as establish a global network of 100% RE regions.

Global 100%RE was founded by partners from civil society, industry, science and policy and was launched in April 2013 in San Francisco, US.

Get Involved!

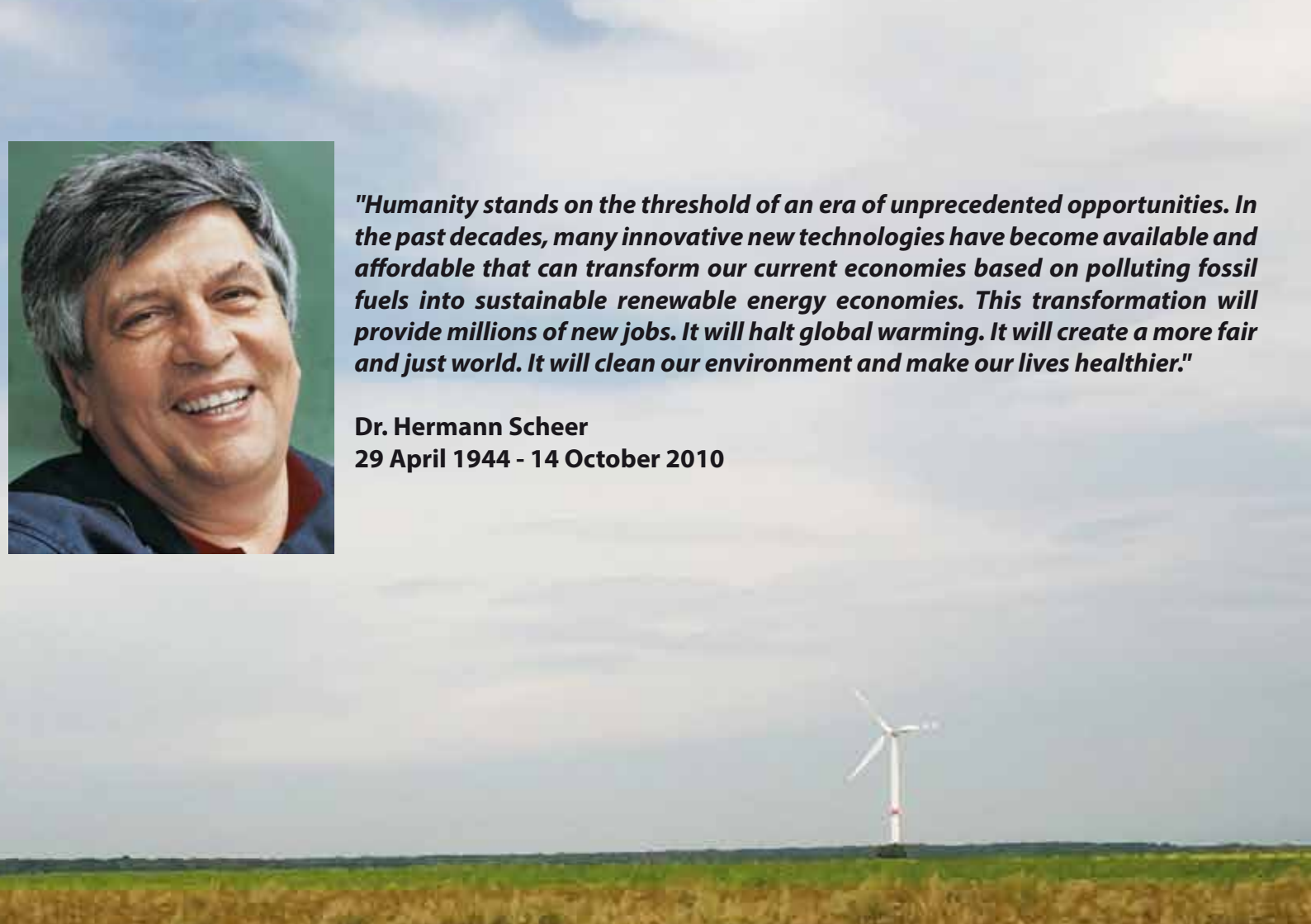


[www.go100re.net](http://www.go100re.net)



***"Humanity stands on the threshold of an era of unprecedented opportunities. In the past decades, many innovative new technologies have become available and affordable that can transform our current economies based on polluting fossil fuels into sustainable renewable energy economies. This transformation will provide millions of new jobs. It will halt global warming. It will create a more fair and just world. It will clean our environment and make our lives healthier."***

**Dr. Hermann Scheer  
29 April 1944 - 14 October 2010**





**WWEA**

World Wind Energy Association

*Uniting the World of Wind Energy Since 2001*

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