

Short Reports

1 UN declares 2014–2024 Decade of Sustainable Energy for All

New York – The United Nations General Assembly declared unanimously the decade 2014–2024 as the United Nations Decade of Sustainable Energy for All.

The resolution stresses the need to improve access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy services and resources for sustainable development. To that end, it also highlights the importance of improving energy efficiency, increasing the share of renewable energy and cleaner and energy-efficient technologies.

There are still 1.3 billion people without electricity and 2.6 billion people in developing countries rely on traditional biomass for cooking and heating. The General Assembly expressed concern that even when energy services are available, millions of poor people are unable to pay for them. In its resolution it called upon Governments, as well as relevant international and regional organizations and other relevant stakeholders, to combine, as appropriate, the increased use of new and renewable energy resources, more efficient use of energy, greater reliance on advanced energy technologies, including cleaner fossil fuel technologies, and the sustainable use of traditional energy resources, to meet the increasing need for energy services.

In response to last year's International Year of Sustainable Energy for All, the Secretary-General launched the Sustainable Energy for All Initiative, which brings together stakeholders in government, the private sector and civil society to mobilize action toward three objectives: to provide universal energy access; to double the rate of global energy efficiency improvement; and to double the share of renewable energy in the global energy mix.

Kandeh Yumkella, Director-General of UNIDO and Chair of UN Energy, will serve as Special Representative for Sustainable Energy for All and chief executive of the effort.

<http://us2.campaign-archive1.com/?u=33cf89da7ade3a85156c5eda4&id=afd9ce8c34&e=6b3ea08c7e> (12/21/2012)

2 High wind from China

Shanghai – The Chinese State Council recently released its white paper, “China's Energy Policy”, which clearly indicates that “Wind power is the non-hydro renewable energy with the biggest possibility of large-scale development and market utilization at the moment.” Wind power is said to be the third most important electric power in the country following thermal power and hydropower.

In the report of the 18th CPC National Congress it was said that “China is determined to promote the revolution of energy generation and consumption, to control the total consumption of energy, to improve energy conservation and to support the development of it as well as of the low carbon industry and renewable energies in order to ensure the safety of national energy.”

According to the country's 12th Five-Year Plan, wind power shall be developed in both concentrated and distributed formats, and the development layout shall be optimized. Wind farm construction will be promoted in areas abundant in wind resources, including the Northwest, North China and the Northeast, and the utilization of distributed wind resources will be accelerated. Offshore wind power shall be developed steadily. Standards and industry monitoring for wind power equipment shall be improved. Wind power enterprises will be encouraged to strengthen research of key technologies to speed up the upgrading of the wind power industry. The consumption capacity of power systems shall be increased by strengthening grid construction, improving grid dispatching, enhancing equipment performance, advancing wind power predictions and forecasts, and so on.

China's offshore wind industry is developing from demonstration projects to large-scale construction. Last November China's largest offshore wind farm attached to the grid – a 150 MW offshore wind demonstration project in Rudong, Jiangsu Province – had been completed. This forms part of the ambitious goal to reach 5,000 MW offshore wind energy by 2015. China's total wind turbine installed capacity shall by then hit 100 GW.

<http://www.prnewswire.com/news-releases/chinas-offshore-wind-industry-entering-era-of-large-scale-development-185876602.html> (07/01/2013)

3 EU passes milestone of 100 GW installed wind power capacity

100 GW of wind power can generate electricity over a year to meet the total consumption of 57 million households, equivalent to the power production of 39 nuclear power plants.

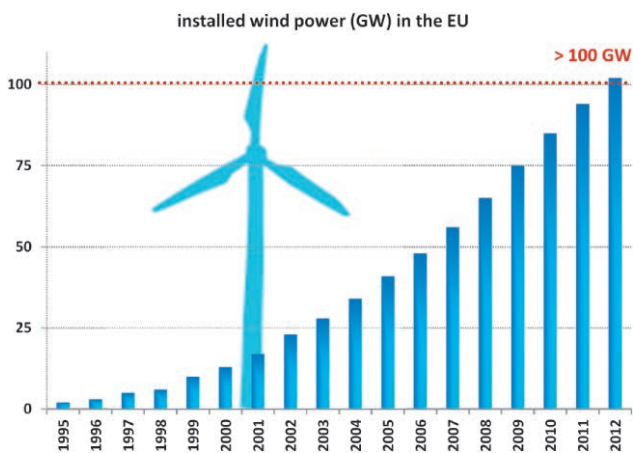
It took the European wind energy sector some twenty years to get the first 10 GW grid connected. It only needed 13 years to add an additional 90 GW. Half of the total European wind power capacity has been installed over the past six years.

“It would require burning 72 million tonnes of coal annually in coal fired power plants to match Europe’s annual wind energy production. Loading that amount of coal on trains would require 750,000 wagons with a combined length of 11,500 kilometres – the distance from Brussels to Buenos Aires, Argentina,” said Christian Kjaer, CEO of EWEA.

“Despite only utilising a tiny fraction of Europe’s vast domestic wind energy resources, wind power is having a substantial impact on Europe’s energy security and environment, and benefits us hugely in creating green jobs and technology exports”, said Kjaer.

Recent wind turbine installations contributing to the 100 GW milestone include:

- Anholt offshore wind farm, 400 MW developed by DONG off the coast of Denmark;
- Linowo, 48 MW developed by EDF Energies Nouvelles Polska in Poland;
- Ausumgaard, 12 MW developed by a private landowner in Denmark (west Jutland);



Graph showing progression of European wind energy (amended from graph EWEA)

- Akoumia, 7.2 MW developed by Greek power company PPCR on the island of Crete.

100 GW of wind power can produce the same amount of electricity over a year as:

- 62 coal power plants, or
- 39 nuclear power plants, or
- 52 gas power plants.

To produce the same amount of electricity as 100 GW of wind turbines in a year you would have to:

- Mine, transport and burn 72 million tonnes of coal, at a cost of €4,983 million, and emit 219.5 Mt of CO₂, or
- Extract, transport and burn 42.4 million cubic meters of gas, at a cost of €7,537 million, and emit 97.8 Mt of CO₂.

[http://www.ewea.org/press-releases/detail/?tx_ttnews\[tt_news\]=1968](http://www.ewea.org/press-releases/detail/?tx_ttnews[tt_news]=1968) (09/27/2012)

4 Pioneering Global Atlas for renewable energy goes online

The world’s first open-access Global Atlas of renewable energy resources went live in January after its announcement at the annual general assembly of the International Renewable Energy Agency (IRENA).

The Global Atlas is the largest ever initiative to help countries assess their renewable energy potential, and companies bringing together data and maps from leading technical institutes and private companies worldwide. It currently charts solar and wind resources, and will expand to other forms of renewable energy over 2013 and 2014.

Its launch came as 150 countries gathered to chart the future of international renewable energy policy in Abu Dhabi. 9 new signatory countries signed on to the Global Atlas, bringing the current number of participating countries to 22.

The Internet-based platform, accessible to all at www.irena.org/GlobalAtlas, is designed to raise awareness of the world’s renewable energy potential, and to help companies looking to invest in new markets. A video and brochure is also available through the webportal. www.irena.org/GlobalAtlas www.res-atlas.org

“In the next 10 years we expect a huge rise in the investments in renewable energy. The Global Solar and Wind Atlas will help us make the right decisions”, says Martin Lidegaard, Danish Minister of Climate, Energy and

Building, and President of the 3rd session of the IRENA Assembly.

“The Global Atlas provides a powerful new tool in international efforts to double the world’s share of renewable energy by 2030,” said Adnan Z. Amin, IRENA Director-General. “With 22 countries now taking part, and more expected to join in the coming months, it is a clear sign of our growing political will to transition to clean, renewable energy.”

http://www.irena.org/News/Description.aspx?NType=A&PriMenuID=16&catid=17&mnu=cat&News_ID=281
(01/13/2013)

5 France backs solar energy counting on ecological patriotism

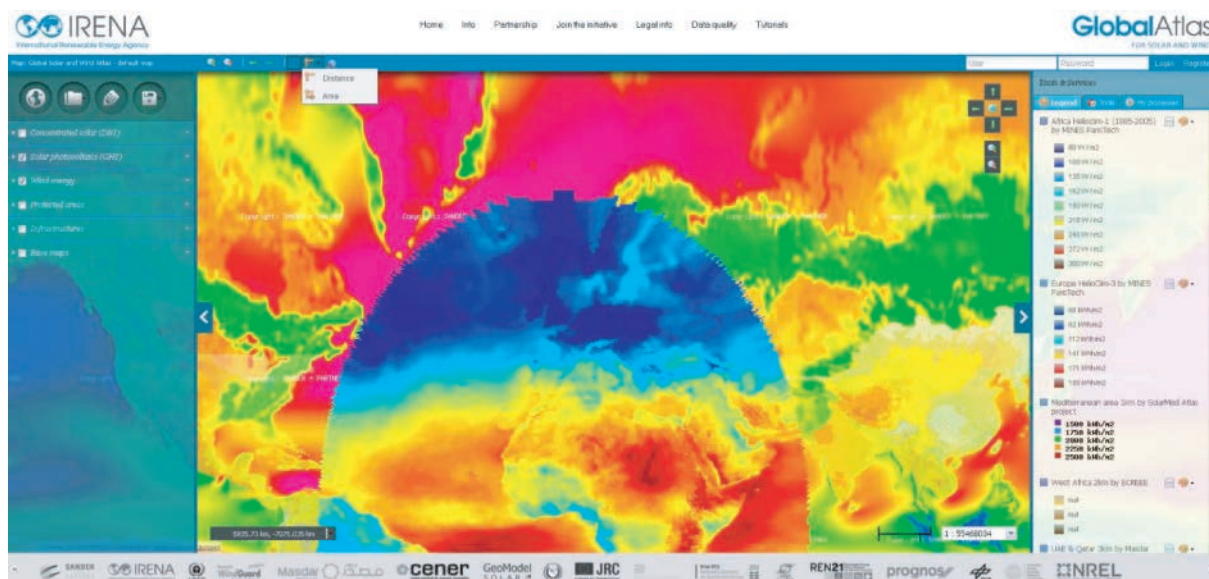
Villaines-la-Juhel – France has doubled its capacity target for photovoltaic power generation and offered more financial support to small solar power farms that use European-made panels in a bid to rescue the country’s ailing solar industry.

Energy Minister Delphine Batho announced the measures during a visit to a solar panel factory in Western France. The production capacity growth target will double to

1,000 megawatts (MW) per year, the equivalent of a small nuclear power reactor, Batho said. Across the Rhine in Germany, the installed capacity for wind and solar electricity production is already equivalent in output to France’s 58 nuclear reactors, even though the output is highly variable.

French feed-in tariffs are reduced by about 10 percent every year to match falling production costs. The French energy regulator CRE adjusts the cut every quarter, to either attract or deter more investments, depending on the volume of installed plants compared with the government’s target. At the same time France will add a bonus of up to 10 percent on the subsidy for feed-in-tariffs paid to generators of solar power for small solar farms using panels made in the 30 countries of the European Economic Area (EEA). The government estimated the annual cost at between 90 and 170 million Euros, to be levied on consumers through the existing CSPE tax on power bills. Following the minister, the country is pushing “ecological patriotism” to help make its solar energy competitive and create jobs.

However, Batho acknowledged the government was taking the risk of having its “Made in Europe” bonus challenged by foreign competitors in international trade courts. Jean-Louis Bal, the head of France’s main renewable energy sector lobby SER, said the measures would allow the sector to survive in the short term but did not offer long-term visibility for the industry.



Screenshot of an example mapping solar photovoltaics and wind energy carried out at the “Global Atlas”. Web site: www.irena.org/GlobalAtlas

These emergency measures, which are due to take effect when a decree is published later this year, are being sought to support the solar industry until a wider energy law is drawn up after the government's so-called "energy transition debate".

<http://www.reuters.com/article/2013/01/07/us-france-solar-measures-idUSBRE9060AN20130107> (01/07/2013)

6 Kyoto Protocol's clean development mechanism surpasses 6,000 projects

Bonn – The Kyoto Protocol's clean development mechanism (CDM), the international market-based tool that incentivizes greenhouse gas emission reduction projects in developing countries, passed the 6,000 project milestone.

The CDM allows emission-reduction projects in developing countries to earn certified emission reductions (CERs), each equivalent to one tonne of CO₂. CERs can be traded and sold, and used by industrialized countries to meet a part of their emission reduction targets under the Kyoto Protocol.

The 6,000th registered project Phuong Mai 3 will install 21 megawatts of wind power capacity to feed the electric power grid in south central Viet Nam, displacing fossil-fuel-generated power and reducing emissions by 32,000 tonnes per year; the equivalent of removing the emissions of 6,058 cars each year.

In the past 10 years, CDM projects have delivered 110,000 MW of renewable energy capacity. That is roughly equivalent to the total power generation capacity of Africa.

There are registered CDM projects in 83 developing countries, ranging from projects that reduce emissions by replacing inefficient wood stoves, to solar power projects that displace fossil fuels, to large industrial projects that destroy extremely potent greenhouse gases (GHGs).

Last December, when they met at the United Nations Climate Change Conference in Doha, Qatar, governments agreed to a second eight-year commitment period for the Kyoto Protocol and confirmed a continuing key role for market-based approaches and tools like the CDM.

http://cdm.unfccc.int/press/releases/2013_01.pdf (01/30/2013)

For more information on the Phuong Mai 3 Wind Power Project (CDM project 7279) visit: <http://cdm.unfccc.int/Projects/DB/ICONTEC1347544560.36/view>

7 IRENA and Fraunhofer ISE sign memorandum for global energy transformation

Freiburg and Abu Dhabi – The International Renewable Energy Agency IRENA and the Fraunhofer Institute for Solar Energy Systems ISE signed a Memorandum of Understanding (MoU) to accelerate energy efficiency and renewable energy solutions globally.

Europe's largest solar research institute, Fraunhofer ISE provides technologies for the transformation of the global energy system with the ultimate goal of efficient, 100 per cent renewable, energy use. IRENA, the global hub for renewable energy policy and the first major international organization to be headquartered in the Middle East, promotes the sustainable use of all forms of renewable energy worldwide.

"By joining forces we intend to create synergies and accelerate the deployment of energy efficiency and renewable energy solutions on a global level," said Fraunhofer ISE's Director, Prof Eicke R. Weber. Fraunhofer ISE has been closely linked to IRENA since its foundation in 2009, the establishment of the headquarters in Abu Dhabi and later the IRENA Innovation Center in Bonn. Collaboration is ranging from joint public event support, in making energy more accessible via the UN Sustainable Energy for All program, to providing insights on how Fraunhofer is developing technologies in different solar energy sectors. These include methodologies on cost analyses which impacted the well-known IRENA "Cost of renewable electricity" studies.



IRENA Director-General Adnan Z. Amin (left) at the MoU signing with Prof Eicke R. Weber, Director of Fraunhofer ISE (Source: www.irena.org).

A new focus has been set on the integration of renewable power into electric grids, assessing the competitiveness status and outlook for solar energy technologies as well the development of global and national frameworks up to NAMAs (Nationally Appropriate Mitigation Actions) and respective strategies to spur innovation and the uptake of state-of-the-art solar energy technologies.

Current collaboration is focused on grid integration and off-grid solutions based on solar photovoltaic (PV) hybrid systems for rural areas in developing countries. Fraunhofer ISE also plans to work with IRENA on renewable energy storage solutions and share the latest findings on this sector with IRENA member states.

<http://www.ise.fraunhofer.de/de/presse-und-medien/presseinformationen/presseinformationen-2013/irena-and-fraunhofer-ise-sign-memorandum-of-understanding> and http://www.irena.org/News/Description.aspx?NType=N&News_ID=293 (01/17/2013)

For more information on Fraunhofer ISE and its work, see: www.ise.fraunhofer.de

8 MENA solar markets to exceed 3 GW annually by 2015

GTM Research's new report *Middle East and North Africa Solar Market Outlook, 2013–2017* (supported by the Emirates Solar Industry Association), forecasts that the annual solar market in MENA countries will reach nearly 3.5 GW by 2015. This will encompass 8% of total global demand in 2015.

Through 2017 the overall regional outlook would be at more than 10 GW. However, the majority of this demand will be established by 2015 when many projects throughout the region see commercial operation. GTM Research's report further states that Saudi Arabia and Turkey will have the highest demand, Saudi Arabia becoming the region's first gigawatt-scale market by 2015.

Another prediction is, that many other countries like Algeria and Morocco will see significant demand in the timeframe between 2018 and 2020. Algeria and Kuwait have been pointed out as countries that have the makings of a significant demand market in the future, provided they establish a stronger regulatory framework for solar power and renewable energies.

With solar demand moving away from the traditional European markets, factors such as electricity needs, insolation and grid prices are increasing demand in the MENA region. Even though countries like Saudi Arabia, Algeria

and Qatar for example are oil rich countries, they are incentivized to invest in solar power to preserve their own hydrocarbon resources and to lower generation costs. Oil importing countries like Turkey, Morocco and Egypt for example are investing to decrease their fuel import costs and to increase energy independence.

GTM Research states in its report that the MENA region is set to experience significant change over the next five years and significant investment opportunities will arise. For many MENA countries, energy diversification is a necessity and this will drive the solar sector. A new energy era wave is set to ripple across the region as the report concludes.

In-depth analysis of the different countries and more forecasts can be found in the 103-page solar market report, Middle East and North Africa (MENA) Solar Market Outlook, 2013–2017. (01/10/2013)

http://www.pv-magazine.com/news/details/beitrag/mena-markets-to-exceed-3gw-annually-by-2015_100009808/#ixzz2HfmayCdC

9 China to join IRENA

Abu Dhabi – China has announced it will join the International Renewable Energy Agency (IRENA), a milestone in international efforts to double the share of renewable energy worldwide by 2030.

The accession of China – a world leader in technology manufacturing and the use of wind, solar and hydropower – marks a major step toward universal membership for the Agency, which currently has 160 participating states.

“China looks forward to becoming a full member of IRENA soon, as well as working alongside all countries for greater achievements in global renewable energy development,” said Liu Qi, Vice-Minister of the National Energy Administration of China, at IRENA's 3rd annual Assembly in the United Arab Emirates capital, Abu Dhabi.

China is the world's largest energy producer, with total installed electrical power generation capacity of 1140 GW, and is increasingly turning to renewable energy to power its growing economy.

It is the world leader for installed capacity of hydro and wind power, with 249 GW of hydro and 63 GW of wind, and is adding more hydro and wind capacity annually than any other country. China's installed generating capacity of solar PV power has reached 7 GW, a tenfold increase over two years. China is also a manufacturing powerhouse for solar PV, wind and hydro power technology.

“The decision by China to join IRENA is a milestone in international efforts to promote renewable energy,” said IRENA’s Director-General Adnan Z. Amin. “I am delighted with the confidence China has shown in IRENA and I look forward to their active participation in the global effort for a clean energy future for all.”

[http://www.irena.org/News/Description.aspx?
NType=NWS&PriMenuID=16&mnu=Pri&News_ID=287](http://www.irena.org/News/Description.aspx?NType=NWS&PriMenuID=16&mnu=Pri&News_ID=287)
(01/14/2013)

For more information see www.irena.org.