



# ng Europe's sinale electricity market

European Wind Energy Association publication

# The most powerful freedom



Leaders of the European Community pose on December 02, 1985 in Luxembourg before reaching the basis of a political agreement on Single European Act

In 1986, European leaders agreed to open up their borders to the free movement of goods, capital, people and services. Ever since, the European single market has ensured trade, competition, consumer choice, employment and prosperity in Europe.

Yet 25 years later, there is still no single market in electricity. Consumers are supplied with electricity that is generally produced nationally, and as competition is ineffective, electricity suppliers can pass any price increase onto that same consumer.

Moreover, the national nature of the power system means fuel supply failures have an immediate impact. The reliance on fuel imports is exacerbated by the limitation imposed on trading electricity due to the lack of a functioning single electricity market and fragmented power grids.

In a presentation to the Heads of State on 4 February 2011, European Commission President Barroso pointed out that the EU pays 2.5% of its annual GDP to import energy and that we can do better with a truly integrated EU energy market increasing GDP by 0.6%-0.8%, 5 million more jobs by 2020 and each consumer saving €100 a year.

A properly functioning European market in electricity would have many benefits:

- Europe will be less dependent on fuel imports at ever increasing prices;
- Europe's energy security will improve through improved access to domestic energy sources such as wind power and other renewables;

• Power prices will go down as wind's low marginal costs push more expensive (and polluting) power sources out of the system.

In order to achieve a single market in electricity, Europe needs both the electricity network to transport electricity from one part of Europe to another, and a common set of market rules.

Just as our transport infrastructure is essential for allowing Europe's four freedoms — movement of goods, services, capital and people — a power infrastructure is needed to allow electricity to flow freely across Europe. The EU must build this European power grid and ensure the market is opened up so that we can benefit from the fifth freedom: free movement of electricity.

# What's happened so far?

Prior to 1996: Many countries had systems whereby one monopoly company both produced the electricity and ran the transmission (longer-distance high voltage) and distribution (local level) electricity systems.

**1996:** The first EU electricity market liberalisation directive is adopted, with the aim of gradually opening the market up to competition.

**2003:** The second EU electricity market liberalisation directive is adopted. It enforces the legal separation of electricity transmission and generation, and prevents the management of the transmission system operators (TSOs) from taking decisions in other parts of the company, but does not address the issue of separate ownership, or "full unbundling".

**2006:** The European Commission launches infringement proceedings against Member States which have not fully implemented the second electricity or gas directives.

**2007:** The European Commission publishes an inquiry concluding that consumers and businesses are losing out because of inefficient electricity markets

**2008:** The European Electricity Regulatory Forum (Florence Forum) decides to establish a "Project Coordination Group" to develop a model for the harmonisation of interregional and then EU-wide "congestion management," – that is, when a power line cannot handle the amount of electricity trying to pass through it - and proposes a roadmap for the integration of electricity markets up to 2015.

**2009:** The third EU electricity market liberalisation directive is adopted. It gives Member States options: full unbundling or a partial separation of transmission and power generation activities. It provides for the creation of a group for grid operators (European Network of Transmission System Operators - ENTSO-E) and for energy regulators (the Agency for

the Cooperation of Energy Regulators - ACER) with binding deliverables and tasks.

**2010:** The European Commission publishes a communication on grid infrastructure development including priority corridors for new power lines to move towards a European grid and enable a single electricity market. The grid operators, ENTSOE, publish a draft Ten Year Network Development Plan, which is a first pan-European grid plan pinpointing seven regional investment clusters for a total cost of €23bn to €28bn across Europe up to 2015. A significant slice of that investment is foreseen for the North Sea (€12 to 14bn) and Baltic Sea (€11 to 13bn).

**2011:** The Heads of State meet for their first dedicated energy summit. They conclude that all Member States must be fully integrated into an internal electricity market by 2014, as previously stated by the Commission.





## "Still no internal market for the most important economic sector"

**Brendan Halligan** 

Chairman of the Sustainable Energy Authority of Ireland and moderator of the debate

"An internal market has been crethat there has, of course, been the

most stupendous achievement in internal market has been created in a modern economy it has not." creation of a single currency. So an

ated for practically everything and terms of integration, which is the for practically everything - but for probably the most important sector

### "The Commission is fully committed to the finalisation of the internal market"



Head of Unit for Regulatory Policy & Promotion of Renewable Energy, European Commission

"We think that Europe-wide markets will create the depths and the liquidity to enable us to make the investments which are so absolutely essential to de-carbonise our energy markets. We do need single and interconnected markets to absorb, for example, huge amounts of renewable electricity. And ultimately, this is good for the consumers. So the Commission remains fully committed to the finalisation of the internal market. We think we've come a long way but there's a lot that still needs to be done."



### "This is incompatible and unsustainable at the moment"

Hans ten Berge

Secretary General, The Union of the Electricity Industry - EURELECTRIC

we have 27 different legislations. It

"The fact that the Member States are would not be bad if they were compat- the same money. We printed the same pay 12% on your interest in Greece pushing for an integrated European ible. But they are not [...] If I look at coins. We decided to go to one Bank market is one story. The reality is that the state in which we are it looks a little bit like the Euro was. We printed

and we forgot to harmonise the economic policies. The result is that you they pay that - and Germany pays 2%. The result is that this is incompatible and unsustainable at the moment."

## "Even at national level there is no market for energy"



Director General, The European Consumers' Organisation, BEUC

"A single energy market can lead to more competition, to more flexibility, and to security and to enhance

security of supply [...] But the probat national level there is not such by EU legislation. It's in the second

a thing as a market for energy [...], lem for the consumer is that even Consumer rights have been defined

and in the third energy package, but they are not properly implemented for the moment."



## "We have a self-interest in getting competition to work"

Christian Kjaer CEO, European Wind Energy Association

"We have a single European Act that was signed 25 years ago. It has benefited consumers enormously. We have a very selfish interest in getting competition to work. We believe that in a carbon and fuel constrained world

within the next ten years wind energy will be the most attractive investment option because you reduce the carbon and fuel price risk of choosing your energy. The problem today is that you can to some extent pass on that risk

if you are an investor in power plants to the consumer because the markets aren't working. We need to get the competition to work so that investors are exposed to carbon and fuel price risk rather than the consumers. And of

course a single market will not happen unless we have the infrastructure. The same thing in the market for goods, we need roads, we need railroads, to transport our goods. In the electricity world that's infrastructure."

# Voicing their support

More and more voices from many different sectors are calling for a European single electricity market to be developed urgently.

Thinkers and think tanks

#### **Jacques Delors**

"The market liberalisation process must be built on a suitable upgraded Europe-wide energy network.'

www.notre-europe.eu

#### Mario Monti

"The single market sits at the nexus of all Europe's energy policy objectives: competitiveness, security of supply, and sustainability. Europe needs a functioning single market for energy to ensure secure and affordable supplies for its consumers and business. It has to harness its potential to turn its political leadership on climate change in a concrete chance for its innovative industries."

www.energypolicyblog.com

**Business groups** 

### **Business Europe**

"The EU needs to keep on investing in the creation of energy networks, promoting the liberalisation process and standardising market rules."

www.businesseurope.eu

### **Eurochambres**

"The focus [of the EU's 2011-2020 strategy] has to be on the full implementation of the 2<sup>nd</sup> and 3<sup>rd</sup> Energy Package. At the same time it must be guaranteed that the necessary infrastructure is available for implementation.

www.eurochambres.be

**Energy and power grid-related groups** 

### **European Network of Transmission** System Operators

"Many concurrent reinforcements of the grid are needed together so that market integration, renewable energy integration and security of supply are achieved."

www.entsoe.eu

#### Friends of the Supergrid

"The EU has embarked on a process to open up the European electricity market to competition, to facilitate cross-border trade and to reduce the market dominance of existing national suppliers. This competition will drive down prices, increase innovation and underpin the growth of a low carbon economy across Europe."

www.friendsofthesupergrid.eu

### **European Federation of Energy Traders**

"Effective separation between operating, managing and investing in a transmission network (the "TSO" business) and any affiliated supply, trading, generation or production businesses is essential [...] Whether two or three options are given to Member States, we believe it is important that the EU achieves greater consistency between methods for unbundling of government and unbundling of privately owned TSO businesses.'

www.efet.org

### **European Renewable Energy Council**

"The development of a modern and integrated European energy grid is crucial to achieve the EU's objectives of competitiveness, sustainability and security of energy supply. Furthermore, in order to meet its 2020 climate and energy targets, the EU has to accelerate its ambition to create a single European power market, based on renewable energy, an EU Super Grid as well as a Smart Grid, in order to facilitate an intelligently and efficiently interconnected electricity system of both centralised and decentralised renewable energy installations."

www.erec.org

Ingmar Wilhelm, President of the European Photovoltaic Industry Associa-

"First of all the single market benefits consumers - that is very important. The second benefit, of course, is to give a clear incentive to the renewables industry to get more efficient and, therefore, to prepare itself much better for export opportunities."

www.epia.org

#### **Decision-makers**

"Energy is a key driver for growth and a central priority for action: we need to complete the internal market of energy, build and interconnect energy grids, and ensure energy security and solidarity. We need to do for energy what we have done for mobile phones: real choice for consumers in one European marketplace. This will give us a real energy community in

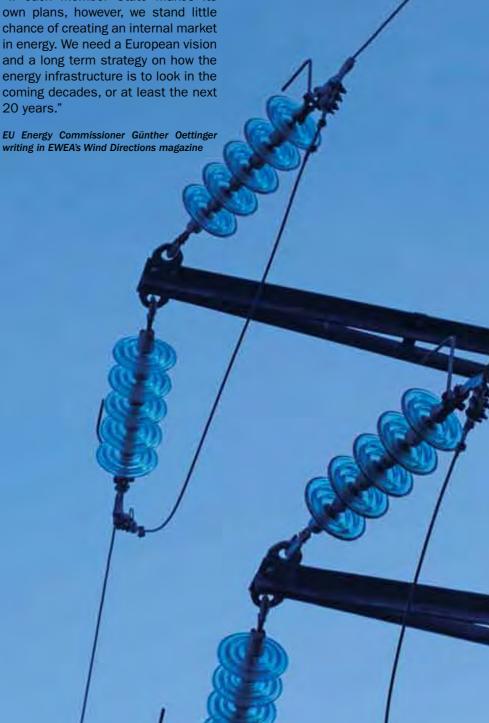
We need to make frontiers irrelevant for pipelines or power cables. To have the infrastructure for solar and wind energy."

José Manuel Durão Barroso, President of the European Commission, State of the Union 2010 - Strasbourg, 7 September 2010

"If each Member State makes its own plans, however, we stand little chance of creating an internal market in energy. We need a European vision and a long term strategy on how the energy infrastructure is to look in the coming decades, or at least the next

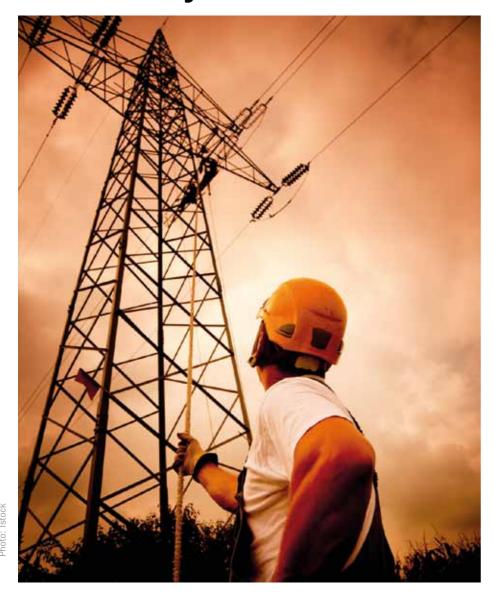
"The EU needs a fully functioning, interconnected and integrated internal energy market. Legislation on the internal energy market must therefore be speedily and fully implemented by Member States in full respect of the agreed deadlines. Council and European Parliament are invited to work towards the early adoption of the Commission's proposal for a Regulation on energy markets integrity and transparency [...] The internal market should be completed by 2014 so as to allow gas and electricity to flow freely."

EU Heads of State in the conclusions to the Energy Summit, 4 February 2011





# Steps to a single electricity market



For the single electricity market to be reached in Europe, several steps are crucial:

- The power grid needs to be upgraded and extended across Europe to enable electricity to be traded freely across country borders, so that it can reach consumers wherever they are.
- ·Permitting and planning procedures for new grid lines must be streamlined and simplified.
- •The EU needs to provide innovative financing and investment tools for power lines and in case of market failures provide direct financial support.
- ·The power system must become more flexible -not only by increasing the use of flexible forms of power generation such as hydropower, but also improving demand-side management through, for example,

storage possibilities in consumers' homes.

- ·Ensure power can be bought and sold on the market for under a day ahead ("intra-day market") and establish integrated cross-border balancing markets to contribute to the sharing of reserve power.
- ·Shorten "gate closure times" that is, the amount of time for which the producer has to forecast his power output in order to bid on the market, to allow renewable energy output to be predicted more accurately.
- · Harmonising the structure of technical requirements for putting energy on to the grid (known as "grid codes") across Europe to make variable renewables more "grid-friendly" and give grid operators and manufacturers clarity what can be technically best provided.

# A long-term call

EWEA has been repeatedly calling for a Europe-wide grid and a single electricity market in the last few years.

Last June, EWEA launched a statement with EURELECTRIC, saying: "A truly European approach to grid planning, together with the integration of wholesale markets, are crucial to the large scale deployment of renewable energy, including wind power, and improving security of energy supply".

Last November, EWEA launched a joint conference statement with the European Network of Transmission System Operators for Electricity (ENTSO-E), the European Wind Energy Association (EWEA), the German Engineering Federation (VDMA Power Systems) and the German Wind Energy Association (BWE).

They called for the EU, its Member States, regulators and industry to acknowledge the urgency and importance of major grid investments, by speeding up permitting for grid investments, supporting cross-border regulation, cooperation and coordination for speedy implementation of European integrated wholesale electricity markets,



kable. It has boosted trade, competition and prosperity consumer choice, and a hugely expanded market for but

But 25 years after the signing of the Single European Act there is still no single market in electricity.

se in the price of the coal, gas - or in the future carbon - straight onto the con loss of business. This is not acceptable.

ust show similar determination in achieving a single market in electricity, and the Heads of State poortunity to show such courage and vision by agreeing on 4 February to create a single market























Most recently, just before the Heads of States' energy summit on 4 February 2011, EWEA launched a statement calling for them to act to create a single electricity market with the same determination previous EU leaders had shown 25 years ago when creating an internal market. It highlighted the many benefits of a single electricity market such as improved security of supply, lower power prices and greater amounts of zero-carbon renewables. This statement was supported by a wide range of business and groups.





### **About EWEA**