

## EU Policy Are these the issues?

Hans ten Berge Secretary General EURELECTRIC

Prague, 26 April 2016



# The European decarbonisation agenda brings a new reality to the power system...

Long term EU 2050 Roadmap

#### GHG emission reduction objectives of the EU



Source: EURELECTRIC

\* RM refers to COP15 where "world leaders agreed that global average temperature should not rise more than 2°C"



2030 Energy & Climate Framework

- Impact Assessment mentions "limit global temperature rise to below 2°
- EUCO "will revert to this issue after the Paris Conference"

#### ...and the Paris Agreement will probably speed up that process

- Art. 2(1a) speaks of "well below 2°C" and "to pursue efforts to limit [the increase] to 1,5°C"
- A target of well below 2C requires strengthening of EU 2050 objectives and also has implications for 2030 policy delivery to ensure a cost effective trajectory to 2050



### Low-carbon technologies represent 56% of EU electricity generation



Low-carbon technologies contribute to more than 50% of EU power generation since 2012. decreasing share of fossil fuels in the power mix and a decrease in demand are contributing to a decline in the  $CO_2$  emissions in the power sector



# All new capacity is green: continued capacity growth in a stagnating market

The pace of RES capacity additions slowed down in 2014 (annual additions of solar power decreased, while wind capacity additions increased).

Decommissioning of gas capacities continued: in 2014 more capacity was decommissioned than added to the system.





### A clear investment dilemma for power companies: how to meet the decarbonisation ambition at today's power prices



Source: Platts and European power exchanges, via the EC's "Quarterly report on European Electricity Markets", Q2 2015

Decrease in demand, subsidies to new capacities with variable RES continue to put pressure on prices.

Recent IEA report shows that LCOE of power generation technologies and storage is rarely below €50/MWh in Europe.



### A strengthened ETS will ensure cost-effective, technology-neutral and market-based delivery of the decarbonisation agenda

- **STRENGTHEN THE EU ETS** EU ETS should be the main driver for RES investments in the electricity sector. Strengthening the EU ETS is therefore a no-regret option. With a reinforced carbon price signal and an accelerated cap reduction additional measures to promote RES can be minimised within the ETS sectors.
- A EUROPEAN APPROACH A non-harmonised (national) approach to reduce GHG emissions could even be counter-productive leading to significantly higher overall energy and decarbonisation costs. It will not only further distort, but also fragment the internal energy market.





### ELECTRICITY MARKET DESIGN: FIT FOR THE LOW-CARBON TRANSITION FIT FOR CONSUMERS



imart Gri

#### ENSURE THAT CONSUMERS REAP THE BENEFITS OF LINKING WHOLESALE AND RETAIL MARKETS



Enable customers to participate through demand response Allow innovative products and dynamic prices, phase out regulated prices

**Clear roles and responsibilities** for all market players, A **level playing field** for prosumers, demand response, storage

Timely roll out of smart meters and smart grids



### **Empower customers**



### Allow customers to choose from a range of services



### Phase out regulated retail prices (still in 14 MS)

#### Figure 42: The existence of regulated prices in the EU MSs and Norway – December 2014



Regulated prices
 Regulated prices with roadmap for their removal

Non-regulated prices

Non-regulated prices with (a potential) ex-ante intervention in price setting

Gas

NHH

Cyprus

Source: CEER National Indicators Database.

urelectric

### eurelectric

# Free up the electricity bill and finance decarbonisation in less distortive way







### **Roll-out fit-for-purpose smart meters**



Source: CEER Database, National Indicators (2014–2015).



eurelectric

VOS CONTACTS 20402,0002,0002,0002,0002,0002,0002,000		
Cocurrent & conserver Same Page 14	the second s	
<ul> <li>Plaze skrete kontral el obrouver nos factorias survotos espace Cisent 34/024 et 73711</li> </ul>	and colored a conserver a set to prove the set of the control of the conserver a set. The prove	
espacetier/dedition Identifiant internet	Retrouvez l'explication de votre facture sur facture.edf.com	Document a summerver 5 ans Flops 3 a
P Parthémore	Votre contrat Electricité "Tarif Bleu"	Original 2012 do 1510 to obligant and the
• No facture, non contrat, non More accurrence of a contrat, non More accurrence of a contrat of classifier	Horaines Insures craubes 22H30-6H30 <sup>FH</sup>	What is a value of value of electric development of a transmission of the closes, 2.4 % p.z., 2 holds 0.4 % in the inducers of transmission electronic development of a second s
Man Constant Server Varial 240,24 in the roce of factoration.	Consommation wur is base d'un velavé client index fit des fit (and the	Pdr allifes du set est
0.800 123.303 (II: Veri pourtransmitrievos referês et consulter este sobo	The VERDOD14 and 20154-2014 12 WWW	Do price conformenters and constants, génerales de torne é dellar de palament integral dans le della poya pour lout réderment, les sources dies sectant nameses de plan autor deplandi os de sacra crimeiras de la faire fois et danne le tapa d'intradi leur entitie à a intradiction de construction de sources TER.
N clent - Mis Tayour to challfore a displator	Mares-centrus 7572 8279 718 0,0010 43,07 85.0	Vecs section for allowing file. Vecs section for allowing indianation éc ité 2 Dissi des allowing for allowing delamation éc ité 2 Dissi des allowing for allowing delamation éc ité 2
20 10 2010 100 efficience action becaused	Total de votre consommation d'électricité (dont acheminement 48,05 €) 137,40	natifiation wespeared and administration of the second states of a second states of the secon
bilino suparad ce er a 2 h	Abonnement Pre-United HT Taxe gr. 2000 31 do: 100	Pour de plus en ples informations, reputs evolus en la factoria a 2002, 754317435 Cede 65 Pour de plus en ples informations, reputs evolus aux conditions Centralie de Vento eu rendez neue dur werw ogs editions a Tous a vici ana cha sus dista e processes et anos
E 09 720 155 10 liceo tor surset	Abstraction 12 and their 12 and America do 20 of 2014 as production Total de votre abonnement (dont acheminement 10.32 6) 26.02 5.3	E foctor www.org/meto.s
Période da 16/02/2014 su 20/04/2014 Delatore ena	Taxas et Contributions III Montan HT Taxas (6.20) de 10%	
EDF SERVER SUENTS TA 1002 anota suent statute train Blev"	Take and the Exemption Provide d'Execution (ECEFE)         MS2         0.00150         15,70         20,9           Classification de Telefox Public d'Execution (CSEFE)         M642         0.01480         27,24         20,9	
Construction of the service of	Conduction Tatland Philametases Description (CTA) 6.5 Total taxes et contributions 46.18	
E bodigves.vdf.com Total Fors TvA 211,68 €	Total Electricité hors TVA 211,68	
Freieve le 02/05/2014	TVA	
11/4 37.016	Villa 2007 % net un motivat tanta de 10242 %           Villa 2007 % net un motivat tanta de 10242 %         3228           Villa 2009 maior motivat tanta de 10242 %         3228	
Prochaine facture versile 20/06/2014 - Prochain relevé versile 21/08/2014	Total TVA 37.81	
VOS MESSAGES PERSONNELS	To Present error to perform structure Calcul Sections of contributions for these : CTA distribution (PDF), do by calculation and the balancement of	
Voire contrat     Peur que voire prochane lacture sor basée sur voire repromitation regile il voire	Pyor plus d'applications concernant les taxes et contributions, rendez-vous aur taxes editions	
No de comple     suffix de nova transmittre votre elleré de complear entre le 0106/31- et e 17.05/2014     volamment par l'iterret au par l'égo voir trait confirméer fiairant en hait à pauche	Deten a general de autorisation de version de la construction de la construcción	
Execticite Tart Biru"		
Poth as impacts (PDL):	Q EVOLUTION DE VOTRE CONSOMMATION EN KWh	
O = P (Using on T ) (A)     O = O = O = O = O = O = O = O = O =		
	Electricite	
Price Badementation	Entrant International E	
Electric 1: Vos Conditions Santrales da:		
Conformements la regismentation, les montanis de la CT# La DSPE, los TCPE et a		
2 TYA edularia (CID) 2014 La CTA Beloka au 01052(1) La try7 reglemente z evidue au 20152(1) La try7 reglemente z evidue au	And a start of the	
den de la regela de mental anter a de la compañía de la denar d Benicularia de carta dom	(Galance-Superprint, 4766) Andri Alari, alari, alari, alari, alari, alari, alari, alari,	
Votre facture évolue Per plus avromation constituition du facure 47 tom		
Conformament avoids control et au viconstitues particuleres de varie de l'offre qui vices avaz avoid de la minimidad control de services de CC de 2017 avoir é compte dont las compte dont las constances.		
fguent cideissos Touarie duccónste		
Norride la barque		
pri casive in constantion de relevence de ce comparcia de constantion médico vous. convector a vote escare O ent espaceClient editioni ou de contactor concordante rEIP.		

#### **Example:**

#### Features of electricity bill mandated by regulation in France (in yellow)

### Make sure comparison websites and new sales channels are subject to regulatory oversight

#### **Comparison Sites Under Fire Over 'Kickbacks'**





urelectric

Price comparison websites have been accused of hiding the best energy deals from consumers.

Instead, tariffs are promoted from providers who are paying the sites up to £60 commission when a user switches, according to 

#### October 20, 2014 8:04 pm

#### Ofgem defends websites over claims they hide best energy deals

Claer Barrett Author alerts -



UK energy watchdog Ofgem has defended price comparison websites against accusations that they are hiding the cheapest "switching" deals in favour of suppliers who pay them commission. The regulator said a completely transparent process would "ruin" the sites' business models.

Labour shadow energy secretary Caroline Flint

Politicians and energy groups reacted with anger on Monday after an investigation by consumer group The Big Deal revealed that popular online switching sites ComparetheMarket, uSwitch, GoCompare, Moneysupermarket and Confused.com gave more prominence to money-saving tariffs that generated commission payments of up to £60 a time.

In most cases, consumers were only given access to the full range of deals - that is, including suppliers who did not pay the sites commission for referring potential customers - if they unticked preselected boxes.



### **Ensure clear and comparable information on offers**



IMPROVED COMPARABILITY OF ENERGY OFFERS

5 key elements to be provided to customers by suppliers in one place, in a short, easily understandable, prominent and accessible manner:

(i) product name and main features

 (ii) total price
 (iii) contract duration, notice period and conditions for termination
 (iv) payment frequency and method options
 (v) supplier's contact details

**BUT NO STANDARD TEMPLATE ACROSS ALL SUPPLIERS!** 



• Rules defining GOs and Electricity Disclosure should be merged in a single Directive

urelectric

• It should be mandatory to verify green products with GOs



- Depending on positive CBA, suppliers should have the possibility on a voluntary basis to use GOs to certify any other product
- Disclosure would be based either on GOs or on the residual mix or a combination of both
- Rules for calculating residual mix should be harmonised at EU-level to avoid double-counting
- Member states should not just report total RES production but also total RES consumption
- Introducing these changes would allow suppliers to differentiate their products and consumers to choose the types of product and the sort of electricity they want



### ENSURE THAT RENEWABLES ARE FIT FOR THE MARKET AND THE MARKET FIT FOR RENEWABLES









ENSURE THAT RENEWABLES ARE FIT FOR THE MARKET AND THE MARKET FIT FOR RENEWABLES

#### Integrate RES in the market

#### **Balance responsibility**

#### Strengthen the EU-ETS



Ensure that possible RES support is market-based and cost-efficient



#### IMPROVE THE ENERGY MARKET TO ATTRACT FLEXIBLE RESOURCES AND ACHIEVE RENEWABLES INTEGRATION

#### MARKET INTEGRATION PATCH TOGETHER...OR HARMONIZE?







#### MAKE THE BEST OUT OF CROSS BORDER CAPACITY







### IMPROVE THE ENERGY MARKET TO ATTRACT FLEXIBLE RESOURCES AND ACHIEVE RENEWABLES INTEGRATION

### **ENERGY**

### Selling KWh

Markets:

• Forward, day-ahead, intraday markets

### **FLEXIBILITY**

Adjusting to shortterm variations

Markets:

 Day-ahead, intraday, balancing markets, ancillary services

### **CAPACITY**

Firm capacity for security of supply Markets:

 Market-based capacity mechanisms where relevant



# DEVELOP A REGIONAL APPROACH TO SYSTEM OPERATION AND SYSTEM ADEQUACY



CAPACITY MARKETS SHOULD BE WELL-DESIGNED AND HAVE A REGIONAL PERSPECTIVE TO ENSURE SECURITY OF SUPPLY IN A COST-EFFICIENT WAY

Objective	Product	How?	Geography
<ul> <li>Security of supply</li> </ul>	► Availability	<ul> <li>Market-based</li> <li>Technology neutral: generation, demand response, storage</li> <li>Open to new and existing plants</li> </ul>	<ul> <li>Open to cross-border participation, and ideally common sourcing at regional level</li> </ul>



## **HOW TO GET THERE?**



**Back up** 

Ministra II



# The power sector can enable a cost-effective decarbonisation of the other sectors: electrification case

#### Targets compared to 1990 levels



#### Transportation case



The **electrification of the non-ETS sectors** (such as transport, heating and cooling) is essential to the EU's decarbonisation objectives.

As electricity becomes increasingly low carbon (and as the power sector is covered by the ETS cap), replacing fossil based systems with electric technologies which utilise electricity will provide a cost-efficient way decarbonise these sectors.



### **EURELECTRIC's priorities and policy recommendations**



**PROMOTING LOW CARBON INVESTMENTS** – Renewables and decentralised technology investments driven by market signals and supported by a strong EU ETS.



**MARKET DESIGN** – Energy, flexibility and capacity should be properly valued so that power plants, demand response and storage are adequately remunerated.



**STRENGTHENING THE EU ETS** – The main instrument to achieve greenhouse gas emission reductions.



**DECARBONISING THE NON-ETS** – Revealing electricity as the key energy carrier to decarbonise the non-ETS sectors.



**ENSURING CONSISTENCY** – Adopting a coherent approach in the targets and measures to cost-effectively achieve the EU climate and energy policy objectives.



**IMPROVING ENERGY EFFICIENCY** – Cost-efficient and market-based policy instruments to leverage the role of decarbonised electricity.



**EFFECTIVE GOVERNANCE** – Ensuring achievement of the EU climate and energy policy targets.



### The electricity system requires three well functioning elements to ensure stable, affordable and low carbon supply is secured

