

10 November 2011





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Detailed information regarding these uncertainties and potential risks are available in the reference document (Document de référence) of EDF filed with the Autorité des marchés financiers on April 18, 2011, which is available on the AMF's website at www.amf-france.org and on EDF's website at www.edf.com.

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Accounts



## Sales by segment at end-September

in € million	TOTAL GROUP	France	UK	EnBW	Italy	Other international	Other activities
September 2010 YTD sales (published)	52,934	26,012	8,031	5,945	4,098	4,938	3,910
IFRS 5 (EnBW)	(5,851)	75		(5,945)	20		(1)
Optimisation SPE	119					119	
September 2010 YTD sales (restated)	47,202	26,087	8,031	-	4,118	5,057	3,909
RTE EDF Transport	(207)	(211)					4
UK disposals (networks, Eggborough)	(1,093)		(1,093)				
September 2010 YTD sales (adjusted)	45,902	25,876	6,938	-	4,118	5,057	3,913
Change	(221)		(163)		-	(50)	(8)
Scope	(6)	10			9	(27)	2
Organic growth	1,478	1,123	(528)		529	466	(112)
September 2011 YTD sales	47,153	27,009	6,247	-	4,656	5,446	3,795

## **Change in sales**

9M 2010 adjusted	9M 2011	$\Delta$ % organic
25,876	27,009	4.3%
6,938	6,247	(7.6%)
4,118	4,656	12.8%
5,057	5,446	9.2%
3,913	3,795	(2.9%)
45,902	47,153	3.2%
	adjusted 25,876 6,938 4,118 5,057 3,913	adjusted 9M 2011   25,876 27,009   6,938 6,247   4,118 4,656   5,057 5,446   3,913 3,795





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### Appendices

Financing and cash management



### **Pro-active assets / liabilities management**

Pro-active funding programme to lengthen the average debt maturity

• £1.25bn 30-year bond issue with a spread of 220 bp

#### Change in the Group net financial debt

€bn –				
Con	30 June 10	30 Dec 10	30 June 11	Post emission
Net financial debt	44.1	34.4	29.2	na
Average coupon	4.7%	4.4%	4.2%	4.2%
Average maturity	8.2 years	8.6 years	8.4 years	9.1 years

EDF is the best rated company in the sector thanks to its financial solidity Upgrade by S&P to AA- in July 2011

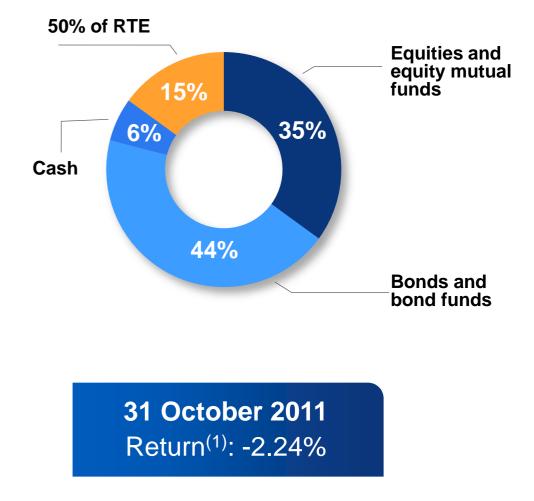


## **EDF dedicated assets**

- Cover nuclear plant decommissioning costs and radioactive waste storage and long-term management
- Portfolio set-up deadline originally set at June 2011 and extended to 2016
- Inclusion of 50% RTE as of 31 December 2010 in order:
  - to include an asset class with steady returns and decorrelated from other assets classes
  - to lower volatility and improve portfolio efficiency

#### Portfolio breakdown as of 31 October 2011

In millions of euros





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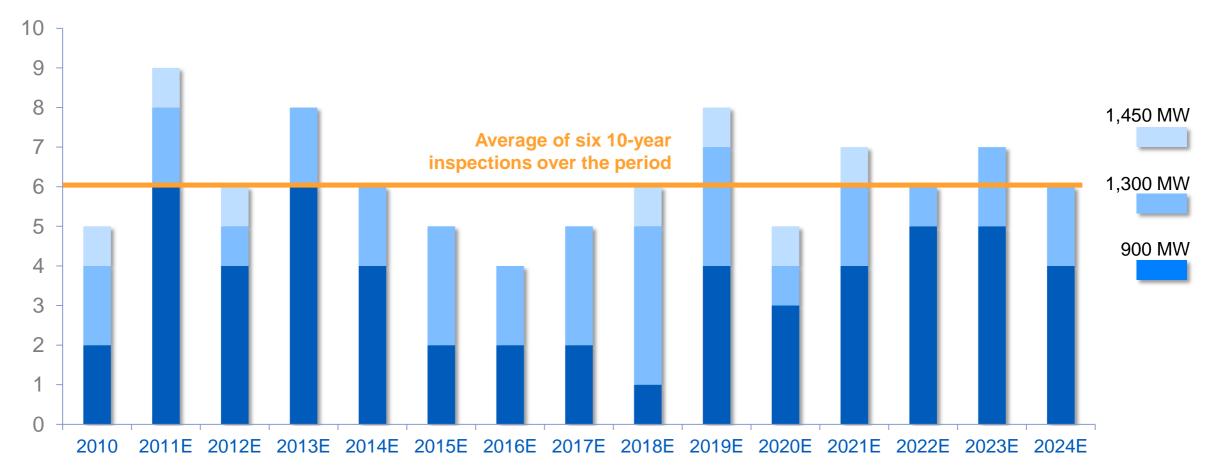
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**Power Generation** 



## An average of six 10-year inspections annually

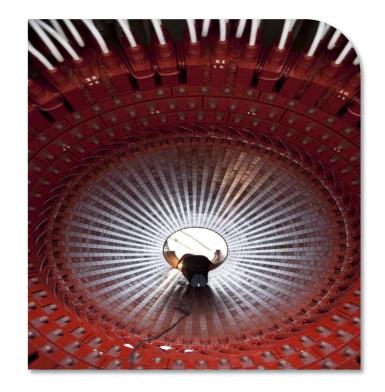


#### **One 10-year inspection = average of 100 outage days**

10

## **10-year inspections in 2011**

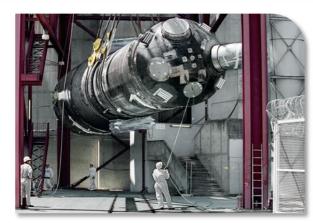
- Nine 10-year inspections (VD) in 2011
  - **VD 3 -** 900 MW: 6 reactors (Bugey 4, Bugey 5, Tricastin 2, Gravelines 1, Fessenheim 2, Dampierre 1)
  - VD 2 1,300 MW: 2 reactors (Penly 1, Catternom 3)
  - **VD 1 -** 1,450 MW: 1 reactor (Civaux 1)
- Situation as of end-September 2011
  - 4 inspections completed: Cattenom 3, Bugey 4, Tricastin 2, Dampierre 1
  - 5 reactors under review: Fessenheim 2, Bugey 5, Gravelines 1, Civaux 1, Penly 1





### **Replacement of large components to continue**

	<b>Replaced at end-September 2011</b>	<b>Priority replacements</b>		
Steam generators (3 SG/900MW reactor)	Twenty 900 MW-reactors	6 priority reactors by 2014 of which 1 in 2011		
Alternator stators	25 reactors	2 reactor renovations remaining in 2011 17 reactors between 2012 and 2017		
Main transformers (3 units / reactor)	Programme ramped up starting in 2012: 4 reactors/year on average until 2020			









## China (TNPJVC)

#### Taishan 1 & 2 (EDF 30%)

- 2 EPRs under construction
- Commissioning of unit 1 scheduled for 2014
- Unit 2 scheduled for commissioning about one year after unit 1
- Construction in progress in 2011:
  - Civil engineering work
  - Electro-mechanical assemblies
  - Dome installed on reactor 1 building
  - Delivery of unit 1 reactor vessel





## **UK nuclear production**

In TWh



In 2010, Sizewell B was offline from mid-March to end-September Output end-October was 47.4 TWh in line with the target of more than 55 TWh for 2010



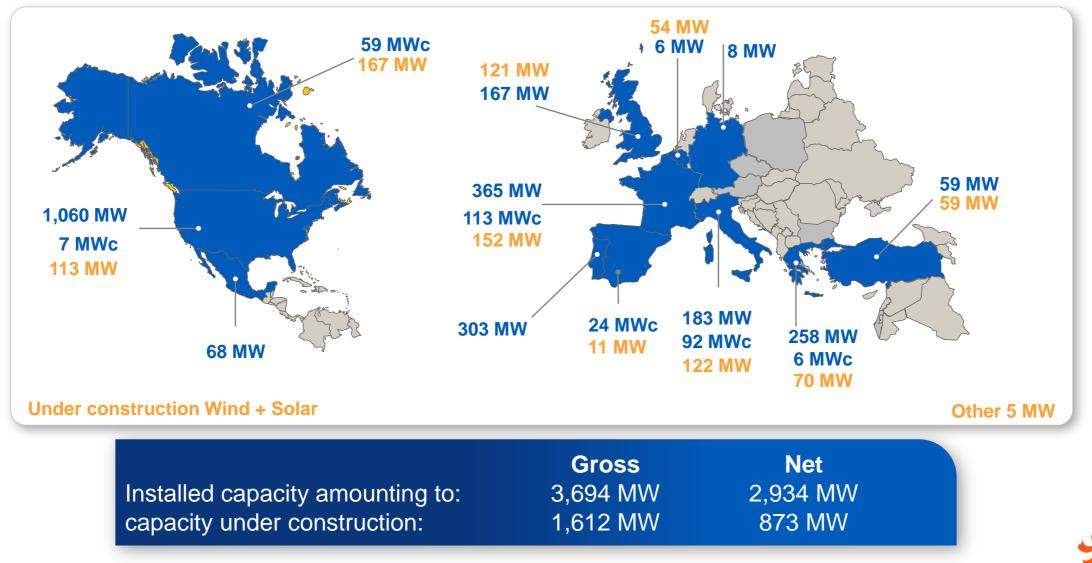
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Renewables

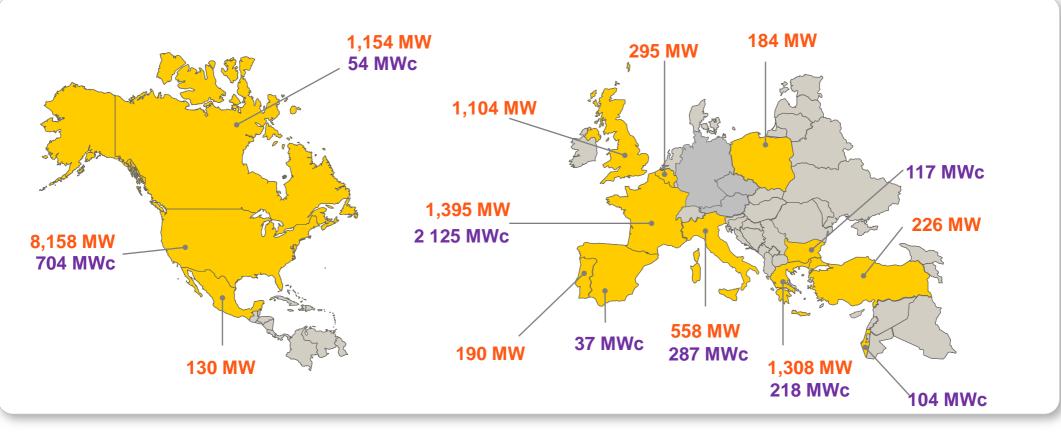


#### EDF EN installed capacity as of end-September 2011



#### Renewables

### EDF: a significant portfolio of renewable projects excluding hydro



Wind Pipeline: 15 GW

**Photovoltaic Pipeline: 4 GWc** 

A pipeline of about 19 GW in capacity

#### Renewables

# EDF EN – Installed capacity and capacity under construction by type at late September 2011

In MW

	Gr	OSS	Net			
	Real 31/12/2010	Real 30/09/2011	Real 31/12/2010	Real 30/09/2011		
Wind	2,923	3,167.8	2,246.7	2,475.0		
Solar	267.1	345.5	233.2	300.4		
Hydraulic	131.4	77.4	102.9	75.9		
Biogaz	56.0	57.9	55.5	57.3		
Biomasse	26.0	26.0	18.2	18.2		
Cogeneration	19.2	19.2	6.7	6.7		
Total installed capacity	3,422.7	3,693.8	2,663.2	2,933.5		
Wind in construction	918.0	1,283.5	564.1	706.4		
Solar in construction	162.6	322.1	101.3	161.2		
Other in construction	8.5	6.5	6.7	5.1		
Total capacity under construction			672.1	872.7		
Total	4,511.8	5,305.9	3,335.3	3,806.2		





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### Appendices

French regulation



## **ERDF - Linky**

#### Implementation of a remote metering system: replacement of 35 million meters in France

- A successful experiment with almost 300,000 meters
  - CRE (French Energy Commission) proposes that Linky be rolled out nationally (July 2011)
  - Approval of the roll-out guidelines by the French Ministry of Industry (28 September 2011)
- What comes next?
  - Investment decision by ErDF & EDF Board of directors subject to appropriate financing conditions
- Benefits expected
  - Improvement in customer service
    - → remote operations, real-time billing, information, faster repairs
  - A key link in the networks of the future
    - → smart grids: integration of renewable output, electrical vehicles, etc.
  - Improvement in Group performance (lower management costs, fewer on-site visits, reduction in non-technical losses)

An investment of about: €4bn<sub>2010</sub>

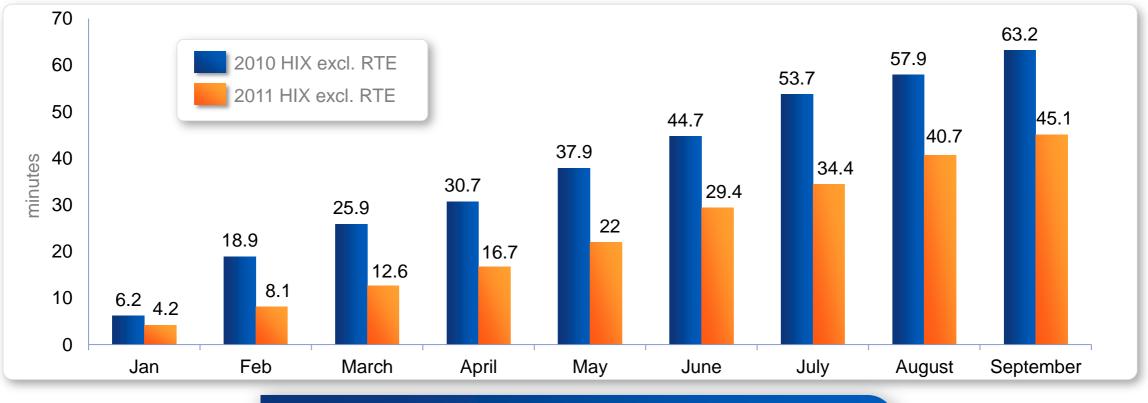




## **Continuity of supply in France**

#### HIX Criteria excluding exceptional events and RTE Average outage duration for low voltage(BT) clients(E-RES R)

#### Cumulated duration at end-of-month



#### Best quality results since 2006

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### Appendices

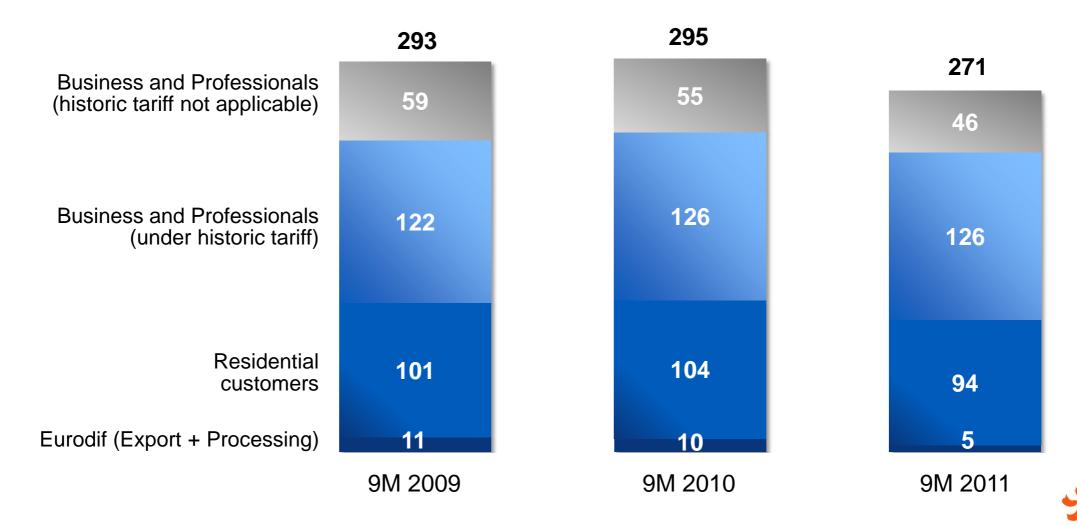
Supply



## **EDF's electricity business in France**

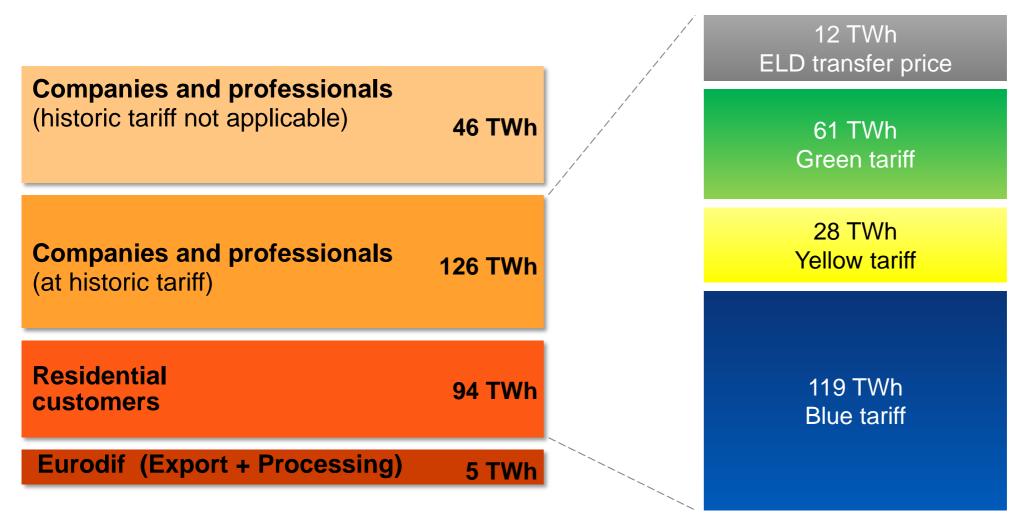
TWh

#### Sales to end-customers



## **EDF's electricity business in France**

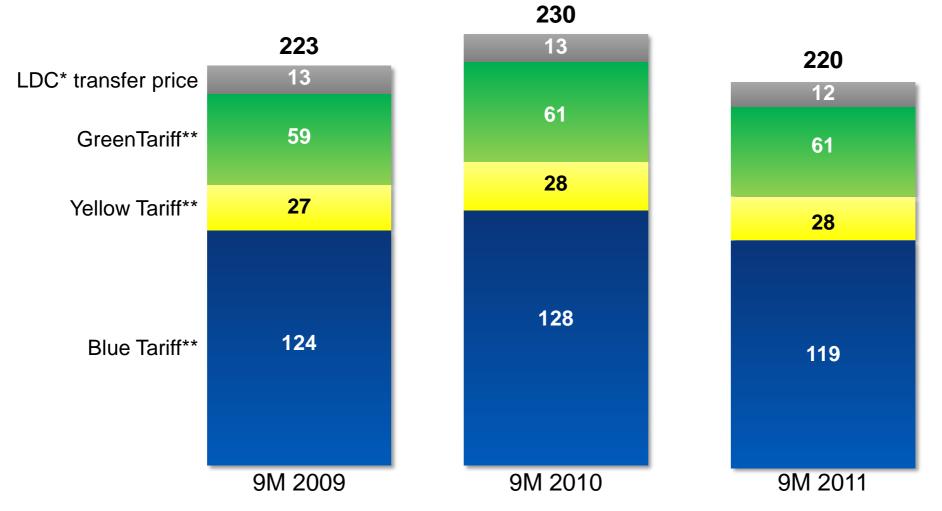
#### As of 30 September 2011 end customer sales



## **EDF's electricity business in France**

TWh

#### Sales under historic tariff



**S**edf

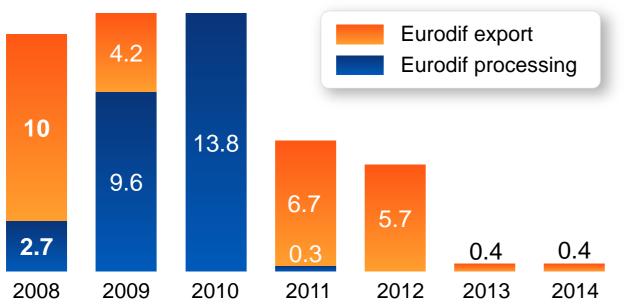
\* Local Distribution Companies (ELD)

\*\* including own consumption

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## EURODIF

- Eurodif "Processing": providing electricity to Eurodif for uranium enrichment dedicated to EDF (purchase price of nuclear fuel is netted against the service of providing this electricity)
- **Eurodif** "Export": selling electricity to Eurodif for uranium enrichment to be sold to clients besides EDF



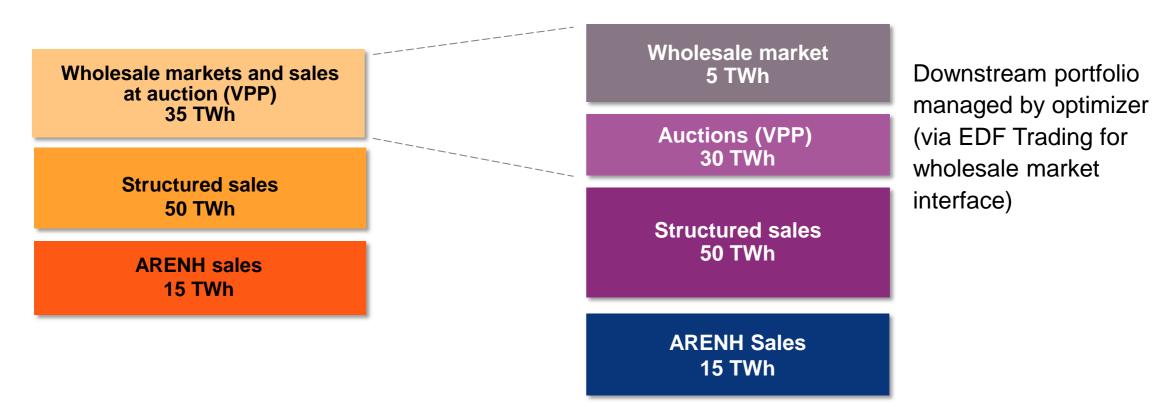
The gradual shutdown (from end-2010 to end-2012) of the George Besse1 facility (enrichment plant by **gas diffusion**), followed by the gradual start of the George Besse 2 facility's enrichment capacities (**via ultracentrifuging**) will result in a substantial energy savings (20 - 50 X less energy consumed per SWU<sup>1</sup>)



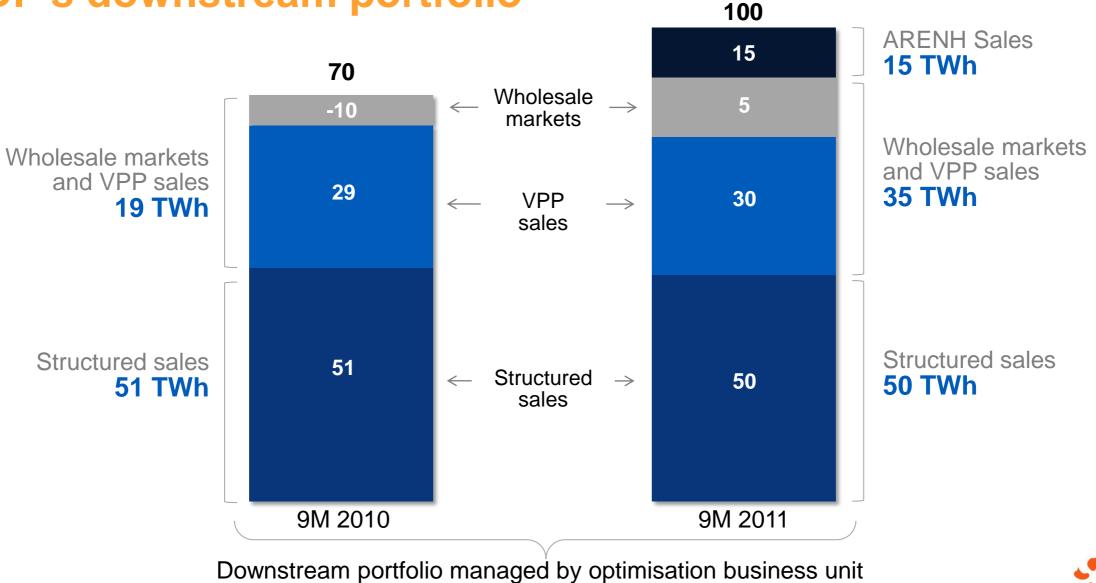
#### <sup>26</sup> <sup>1</sup> SWU : Separative Work Units : separation of isotopes of uranium 235 & 238

#### Electricity volumes delivered to Eurodif (in TWh)

## EDF's downstream portfolio – end September 2011



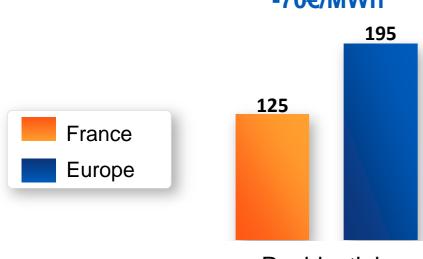
## **EDF's downstream portfolio**



(via EDF Trading for the wholesale market interface)

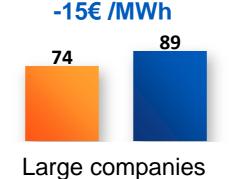
## **EDF** tariffs are the lowest in Europe\*

€/MWh



-70€/MWh

**Residentials** 



Price differential in €/MWh between France and 16 other EU countries (including VAT for residential and professional customers, excluding VAT for the other categories)



## **Change in tariffs and inflation in France**

	Fr	French tariff increases are done once a year (during summer)						
	2005	2006	2007	2008	2009	2010	2011	
Inflation (July N / July N-1)	1.6%	2.0%	1.1%	3.6%	-0.7%	1.6%	2.0%	
Average	0%	1.7%	1.2%	3.6%	2.7%	3.8%	2.2%	
o/w:								
Blue	0%	1.7%	1.1%	2.0%	1.9%	3.2%	1.7%	
Yellow	0%	1.7%	1.5%	6.0%	4.0%	4.5%	3.2%	
Green	0%	1.7%	1.5%	8.0%	5.0%	5.5%	3.2%	
TaRTAM			1.5%	8.0%	0%	0.6%	n/a	
Increase incl. TaRTAM			1.3%	4.1%	2.3%	3.4%	n/a	
Non-nationalised distributors	0%	0%	0%	8%	5.6%	10.0%	1.3%	

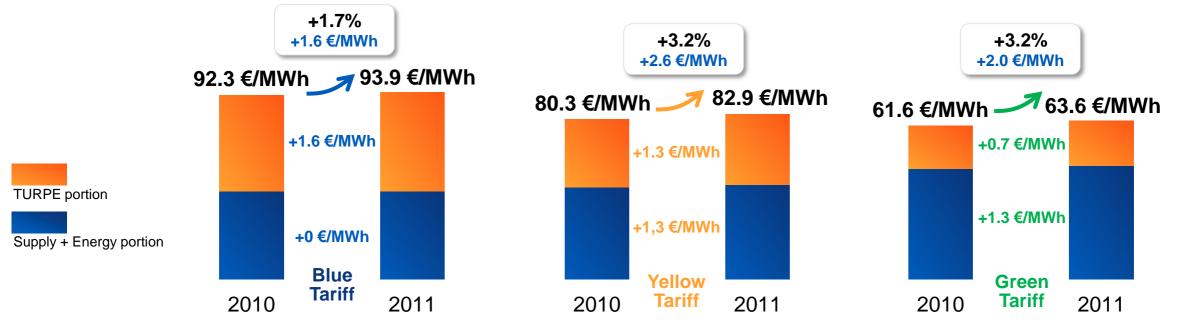
#### Supply

## **2011 French tariff hikes**

Tariffs hikes are decided once a year:

As far as 2011 is concerned, the following increases have been implemented as of 1 July

- 1.7% for residential & small business customers (blue tariff)
- 3.2% for other professionnal customers (yellow and green tariffs)
- Hikes include TURPE increase of 1.08.2011 amounting to 3.94% as for distribution and 2.56% for transport

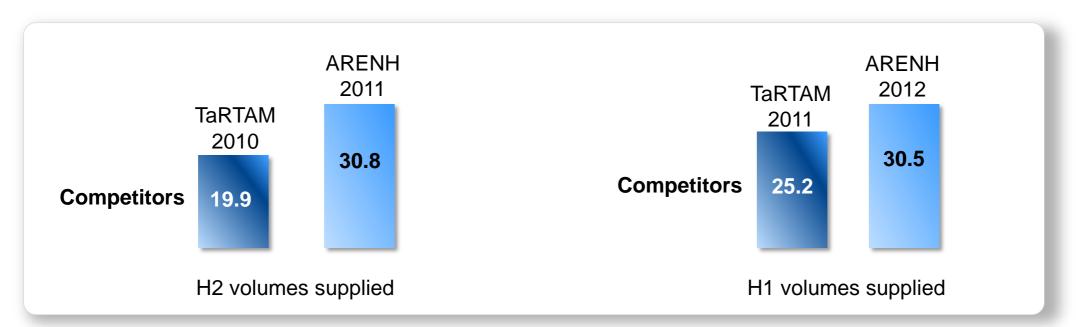


Due to TURPE, supply + energy portion is stable for residential & small business customers



## **ARENH** sales volumes allocated to competitors

In/TWh



- Maximum total volume of EDF's sales to competing suppliers: 100 TWh
- Volumes allocated on 16 June for six months at €40/MWh, equivalent to 85% of supplies
- As of today same volumes asked by competitors for the first six months of 2012 at €42/MWh
  - Can be amended by competitors until 15 November



## **New electricity market configuration to 2025**

- ARENH promotes competitors' access to baseload power produced by EDF nuclear power according to their final customers consumption (max. 100 TWh to be sold by EDF)
- TaRTAM ended as of 30 June 2011
- Yellow and Green tariffs (I&C customers: 120 TWh<sup>(1)</sup>) to be terminated in 2015
- Blue tariffs (residential and small business customers: 186 TWh<sup>(1)</sup>) to continue
- 2015 target (at the latest) for bringing energy component of tariffs based on a mix of ARENH + market prices
- Introduction of a market mechanism to ensure reliability of supply through appropriate incentives to build capacity or develop interruptibility





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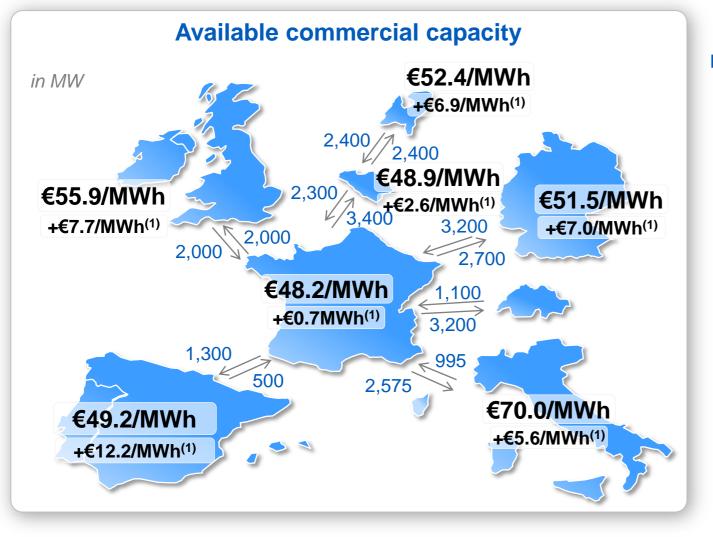


Markets



#### Markets

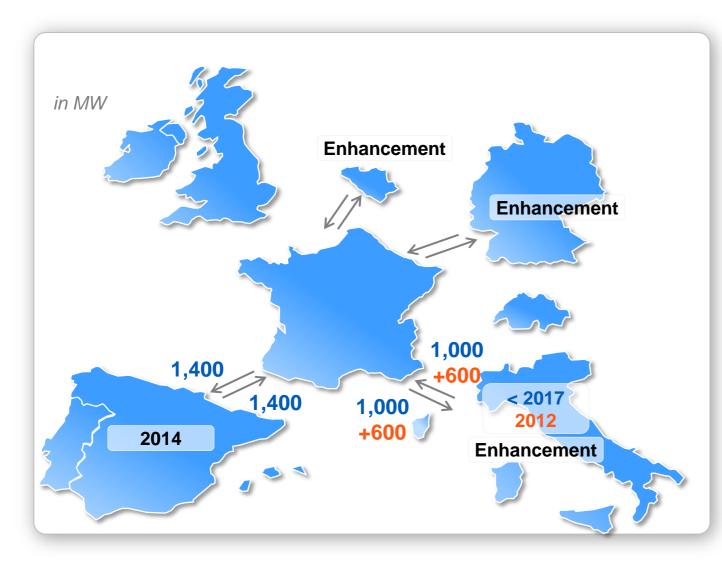
### European energy market remains divided into "electricity plates" - average price in Q1-Q3 2011



- Interconnected but distinct market zones
  - Interconnections: Commercial Capacity for winter 2010-11, estimated at 22/02/11 (in MW, source ENTSOe)
  - Price: average spot price (base Q1-Q3 2011) for:
    - France (Epex),
    - Germany (Epex),
    - UK (EDFT),
    - Spain (OMEL),
    - Netherlands (APX),
    - Belgium (Belpex),
    - Italy (Ipex)



## Interconnection capacity increase planned

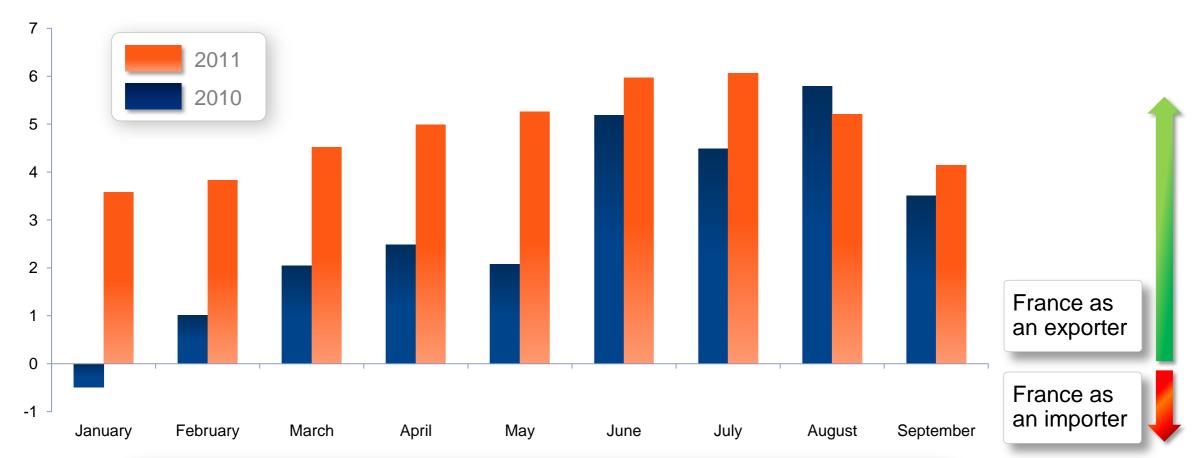


- Interconnection addition
  - France Spain: Baixas-Sta Llogaia (RTE –Project INELFE)
  - France Italy Cornier Piossasco Grande Ile Piossasco (TERNA)
- Enhancement:
  - France Belgium Moulaine Aubange
  - France Luxemburg Moulaine Belval
  - France Belgium St Avold Ensdorf

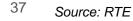


## French trade balance, Q1-Q3 2010 vs. Q1-Q3 2011

In TWh

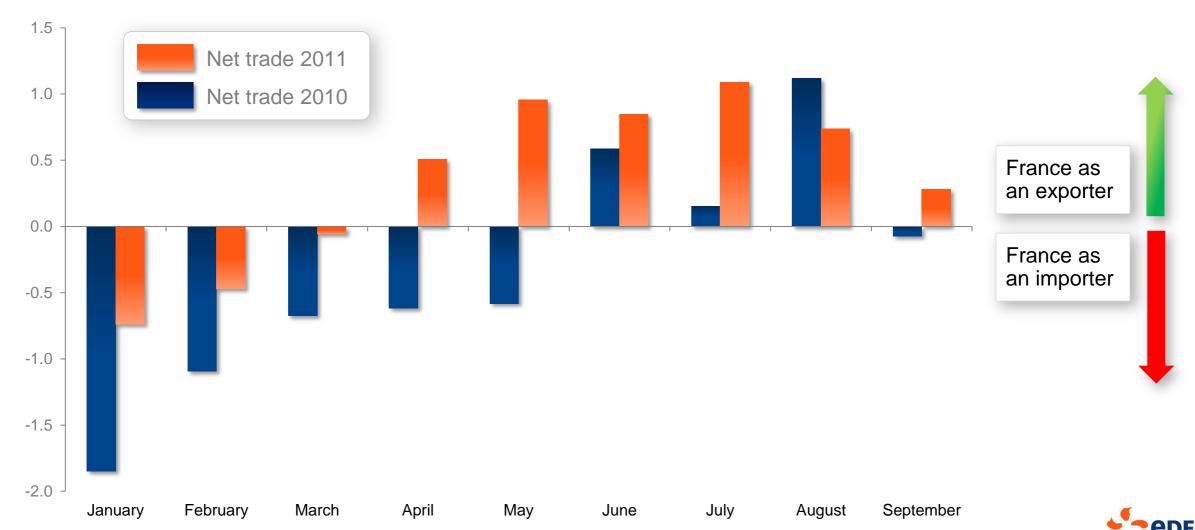


For Q3 2011, French exports are still higher than during Q3 2010 in spite of the increase in the number of planned outages in the nuclear fleet



### Trade with Germany: lower consumption and improved performance of the French nuclear fleet amid less competitive mix in Germany

In TWh



## French trade balance, Q1-Q3 2010

In TWh		2010									
		January	February	March	April	May	June	July	August	September	
Germany	Exports	0.2	0.5	0.7	0.7	0.8	1.5	1.2	1.7	0.8	
	Imports	2.1	1.6	1.4	1.3	1.4	0.9	1.1	0.6	0.9	
	Balance	-1.8	-1.1	-0.7	-0.6	-0.6	0.6	0.2	1.1	-0.1	
United Kingdom	Exports	0.3	0.3	0.4	0.5	0.8	1.0	1.1	1.3	0.7	
	Imports	0.9	0.8	0.8	0.4	0.3	0.1	0.1	0.0	0.2	
	Balance	-0.7	-0.5	-0.4	0.1	0.5	1.0	1.0	1.3	0.5	
Belgium	Exports	0.1	0.1	0.3	0.3	0.2	0.7	0.5	0.4	0.4	
	Imports	0.6	0.6	0.6	0.3	0.4	0.1	0.2	0.2	0.3	
	Balance	-0.5	-0.4	-0.4	0.0	-0.2	0.6	0.2	0.2	0.1	
Spain	Exports	0.1	0.0	0.1	0.1	0.1	0.3	0.2	0.5	0.3	
	Imports	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.2	
	Balance	-0.4	-0.3	-0.4	-0.3	-0.1	0.0	0.0	0.4	0.1	
Italy	Exports	1.4	1.7	1.8	1.5	1.3	1.5	1.7	0.8	1.3	
	Imports	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Balance	1.3	1.6	1.8	1.5	1.2	1.5	1.6	0.8	1.3	
Switzerland	Exports	2.2	2.0	2.3	2.1	2.1	2.0	2.1	2.2	2.1	
	Imports	0.6	0.3	0.2	0.2	0.8	0.4	0.7	0.2	0.5	
	Balance	1.6	1.8	2.0	1.9	1.3	1.6	1.4	2.0	1.6	
											Total Q1-Q3 20
Global	Exports	4.3	4.7	5.5	5.2	5.2	7.0	6.8	6.9	5.6	51.2
	Imports	4.8	3.7	3.5	2.7	3.1	1.8	2.3	1.1	2.1	25.1
	Balance	-0.5	1.0	2.0	2.5	2.1	5.2	4.5	5.8	3.5	26.1



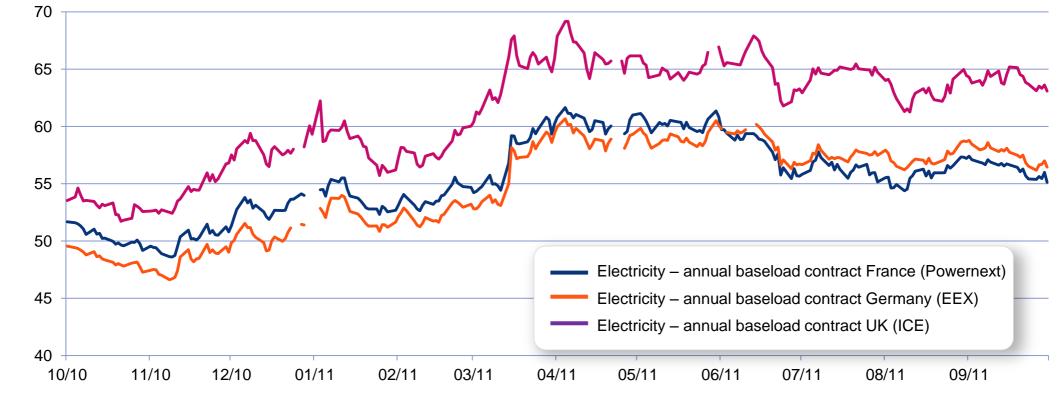
## French trade balance Q1-Q3 2011

In TWh		2011									
		January	February	March	April	May	June	July	August	September	
	Exports	0.6	0.5	0.9	1.0	1.3	1.3	1.3	1.2	0.8	
Germany	Imports	1.4	1.0	1.0	0.5	0.4	0.4	0.2	0.4	0.5	
	Balance	-0.7	-0.5	-0.1	0.5	1.0	0.8	1.1	0.7	0.3	
United Kingdom	Exports	0.9	0.7	0.7	0.6	0.5	0.6	0.7	0.7	0.4	
	Imports	0.4	0.4	0.3	0.1	0.3	0.1	0.1	0.1	0.1	
	Balance	0.5	0.3	0.4	0.5	0.2	0.6	0.7	0.6	0.3	
Belgium	Exports	0.8	0.7	0.9	0.7	0.6	0.9	0.8	0.5	0.6	
	Imports	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	
	Balance	0.7	0.6	0.8	0.6	0.5	0.9	0.6	0.4	0.5	
Spain	Exports	0.1	0.1	0.1	0.2	0.3	0.5	0.6	0.7	0.5	
	Imports	0.4	0.2	0.5	0.4	0.2	0.2	0.1	0.1	0.1	
	Balance	-0.2	-0.2	-0.4	-0.2	0.1	0.4	0.5	0.6	0.3	
Italy	Exports	1.5	1.7	1.7	1.5	1.4	1.3	1.0	0.8	0.8	
	Imports	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
	Balance	1.4	1.6	1.5	1.5	1.3	1.3	1.0	0.8	0.8	
Switzerland	Exports	2.5	2.3	2.5	2.3	2.2	2.2	2.2	2.2	2.2	
	Imports	0.5	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	
	Balance	2.0	2.0	2.2	2.2	2.1	2.1	2.2	2.1	2.0	
											Total Q1- Q3 20
Global	Exports	6.5	6.0	6.8	6.3	6.3	6.8	6.6	6.0	5.2	56.6
	Imports	2.9	2.1	2.2	1.3	1.1	0.9	0.6	0.8	1.1	13
	Balance	3.6	3.8	4.5	5.0	5.3	6.0	6.1	5.2	4.1	43.6



# Electricity prices in France, the UK and Germany (y+1) from 1 October 2010 to 30 September 2011

In €/MWh

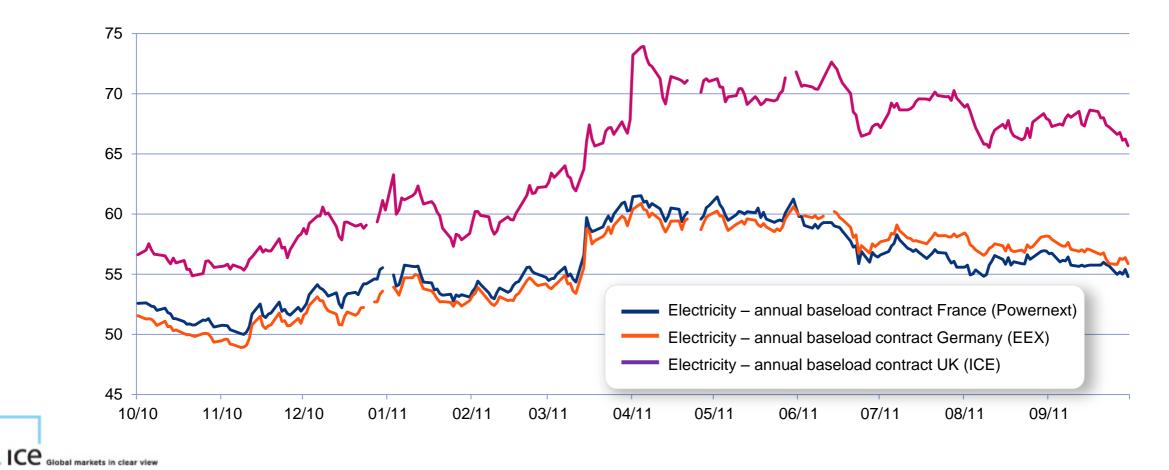






# Electricity prices in France, the UK and Germany (y+2) from 1 October 2010 to 30 September 2011

In €/MWh



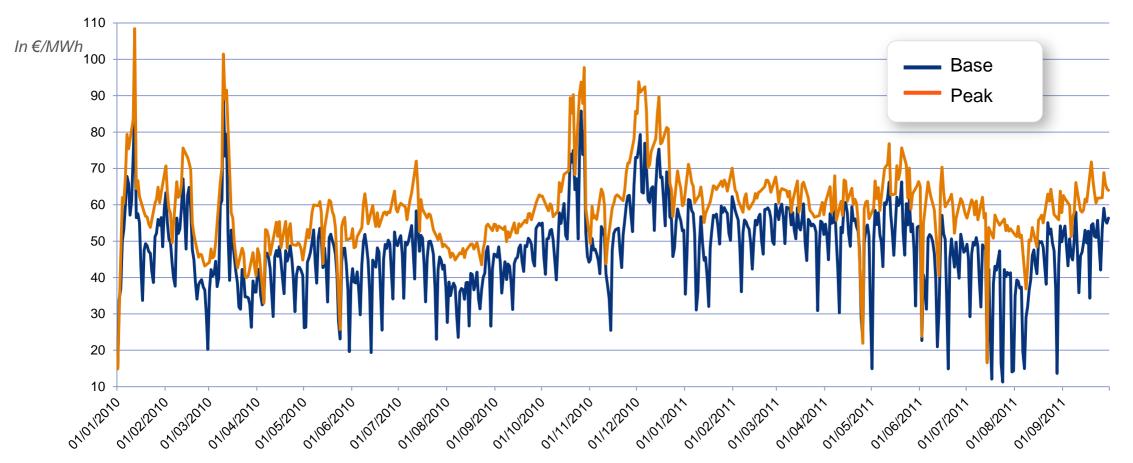


## Electricity prices in France (y+1) Q1-Q3 2011 vs. Q1-Q3 2010



In Q3, power price decrease due to  $CO_2$  price fluctuation

### French spot prices from 1 January 2010 to 30 September 2011



Higher spot prices during Q3 2011 than Q3 2010, due to fossil-fuel price increases



44 Source : Epex

# Brent price (Y+1) in \$/bbl from 1 October 2010 to 30 September 2011

In \$/barrel



Strong volatility resulting fromvarious announcements by central banks and governments



ICE Global markets in clear view

## Coal prices (Y+1) from 1 October 2010 to 30 September 2011

In \$/T



ICE Global markets in clear view

Change in coal price linked to oil price fluctuation



### NBP gas prices (Ygas +1) from 1 October 2010 to 30 September 2011

In p/therm



In Q3 2011, high gas prices consistent with oil market trends

ICE Global markets in clear view

## CO<sub>2</sub> prices (Y+1) from 1 October 2010 to 30 September 2011



CO<sub>2</sub> price affected by gloomy European economic outlook



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ICE Global markets in clear view

## 2011 Third quarter Sales and highlights



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