

# CEER work on RES Support and Harmonisation

‘Delivering 2020 targets cost-effectively’

EU SEW - 25 June 2013

# Format of presentation

- Overview of CEER reports:
  - *CEER Status Review of Renewable Support Schemes in Europe*
  - *CEER Conclusions Paper on the Implications of Non-harmonised Renewable Support Schemes*
- Key messages

The background of the slide is a light blue field with several yellow five-pointed stars scattered across it, similar to the European Union flag. The stars are slightly blurred and have a soft glow.

# **CEER's Review of Renewable Support Schemes**

# Europe wide context

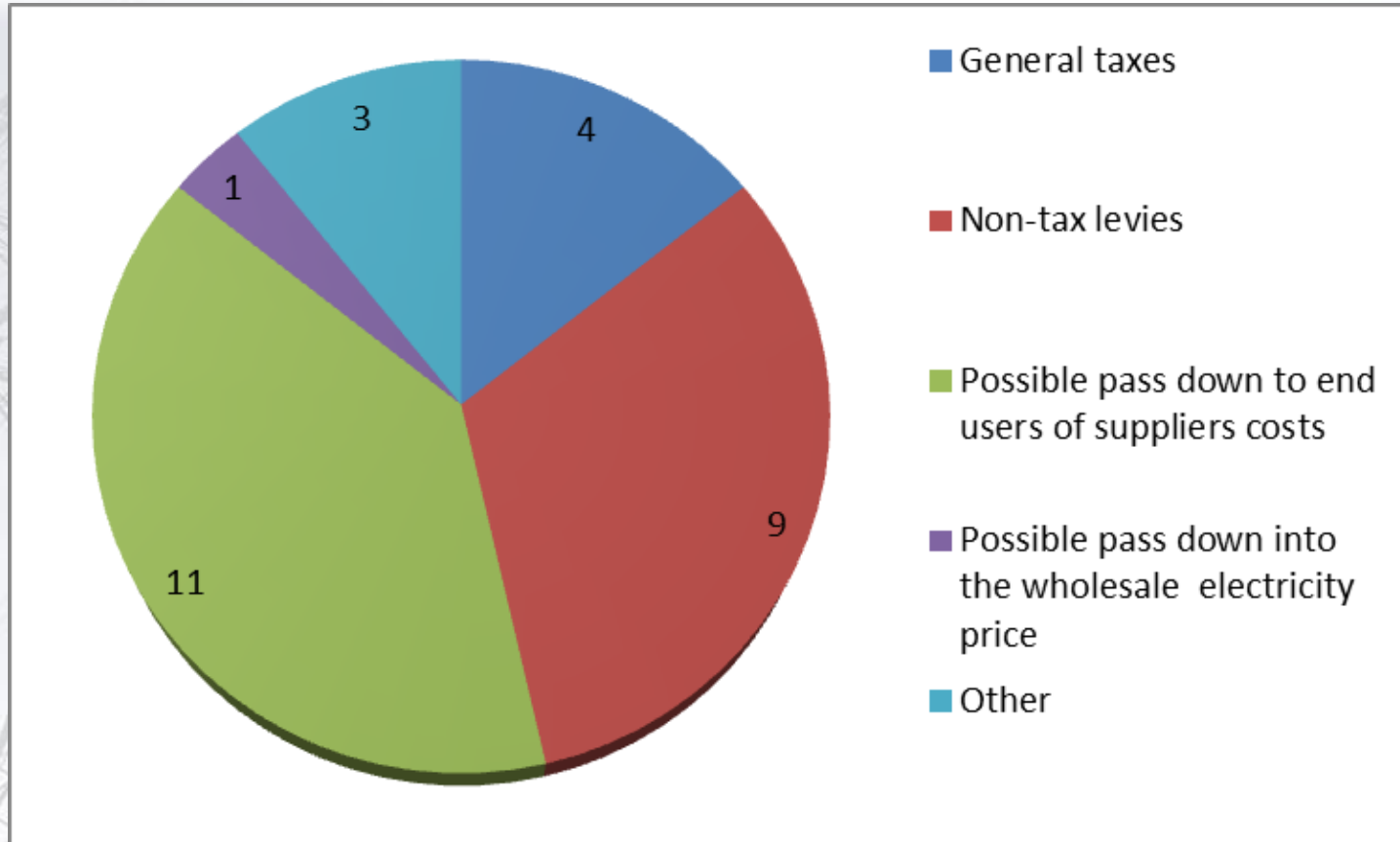
Renewables support needed to deliver 2020 targets should be:

- **Effective**
  - driving deployment and technology development
- **Efficient**
  - costs to consumers no higher than needed
- **Non-distortionary**
  - support not hinder market functioning, cross-border trade and security of supply.

# CEER review on support schemes

- Objective - collect comparable data on support schemes for electricity from renewable energy sources, by technology and type of instrument. This is the second edition (first published in 2011 with 2009 data).
- Provides data on:
  - Financing of support schemes (Feed In Tariffs, certificates, etc)
  - RES volumes receiving support
  - Total costs of RES support schemes
  - Support level per technology (€/MWh)
  - Type of connection charges and regimes in place
- Methodology: support = amount above wholesale price

# Overview of ways of financing RES electricity support schemes (2012)



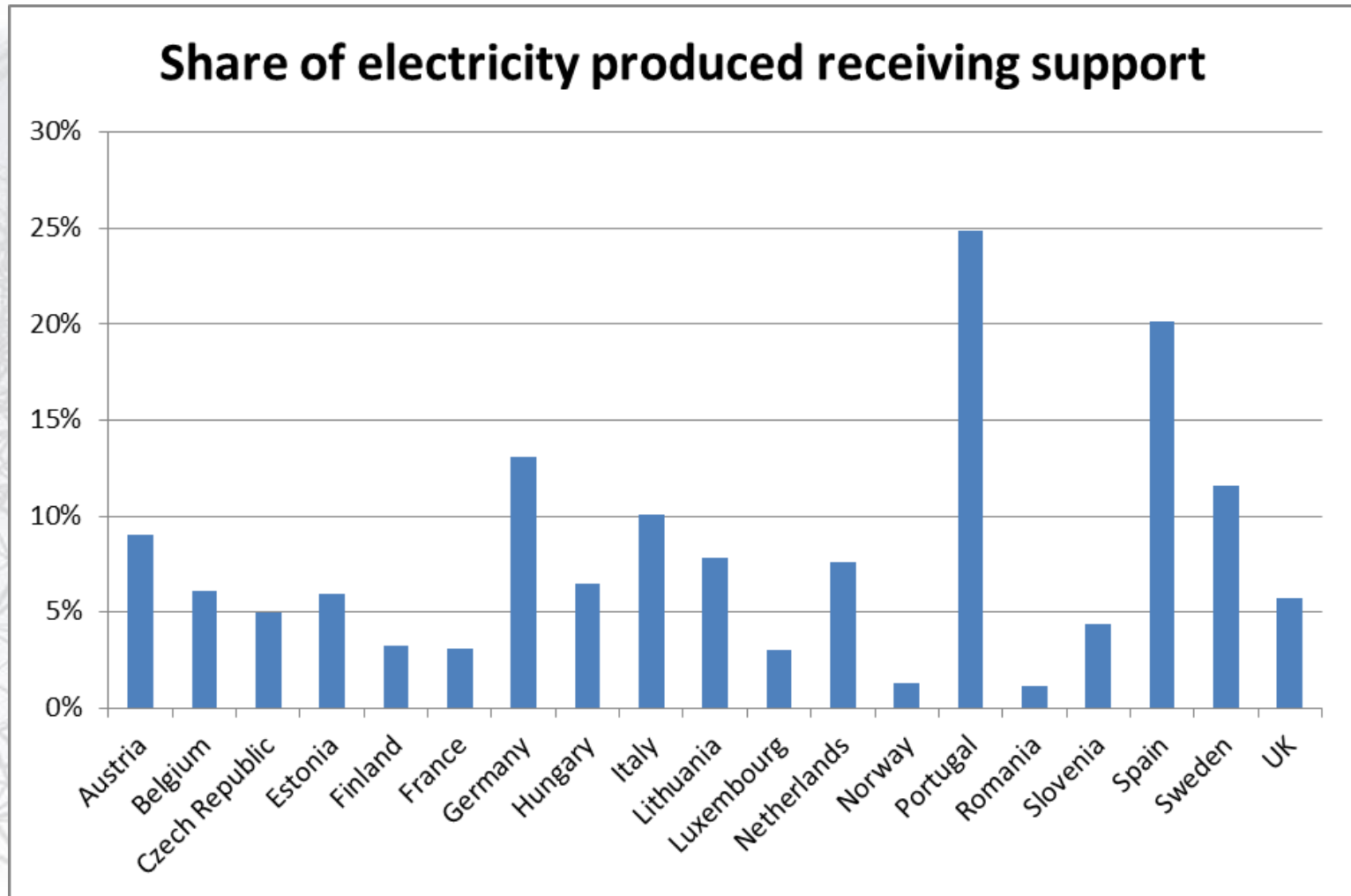


# National support schemes

- Overview of RES electricity support instruments by country
- Also available per technology in the RES report
- Only the instruments for which NRAs provided the expenditure data are included

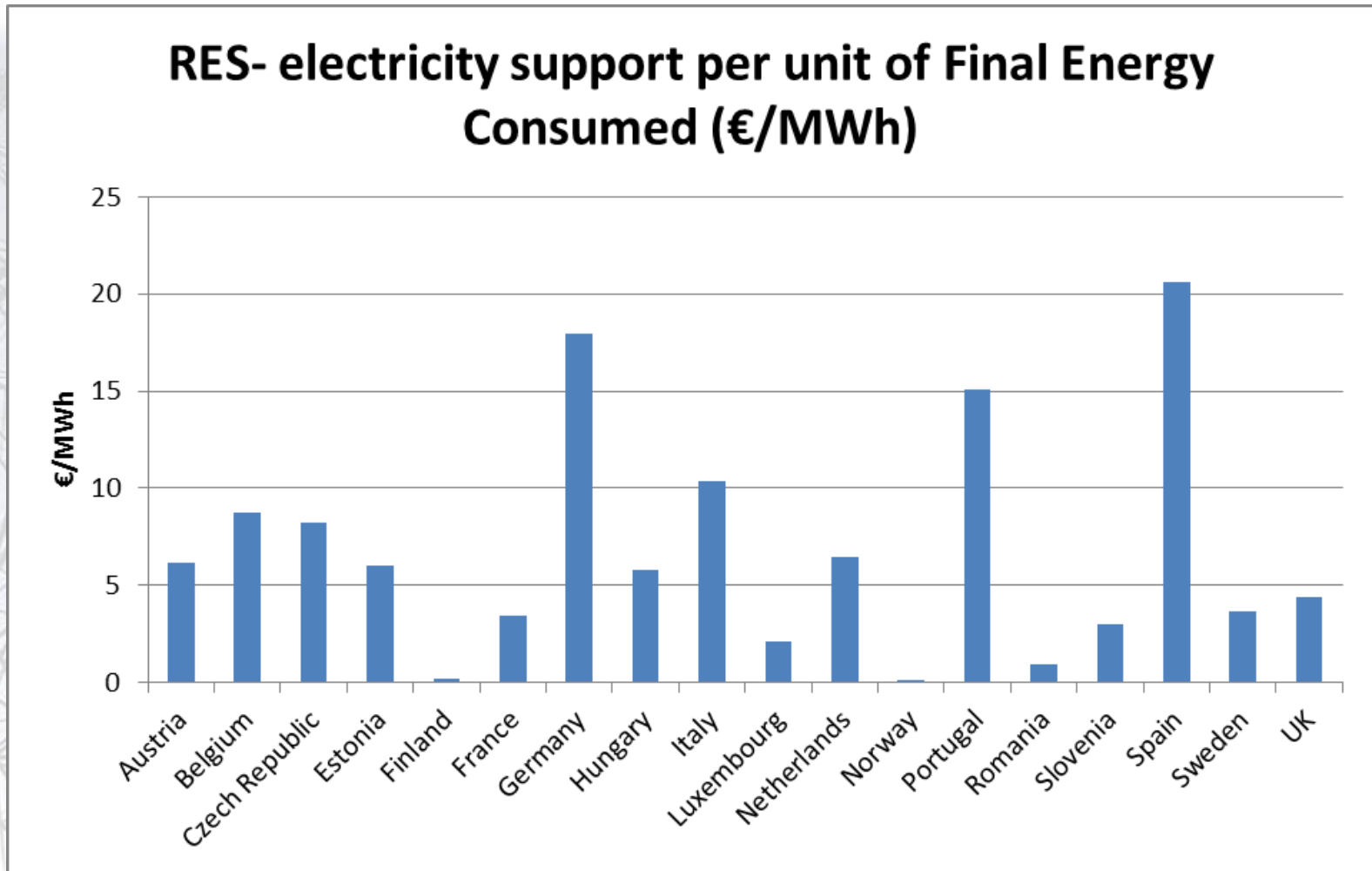
<b>Green Bonus</b>	<b>Excise Tax return</b>	<b>Fee-in-Tarif</b>	<b>Feed-in-Premium</b>	<b>Direct Marketing</b>	<b>Investment grants</b>	<b>Green Certificates</b>	<b>Tendering Process</b>
CZ	Finalnd	Austria	Estonia	Germany	Austria	Italy	Portugal
		CZ	Germany		Norway	Romania	
		Germany	Luxembourg			UK	
		Hungary	Netherlands				
		Iatly	Spain				
		Lithuania					
		Luxembourg					
		Portugal					
		Slovenia					
		Spain					
		UK					

# Volumes supported





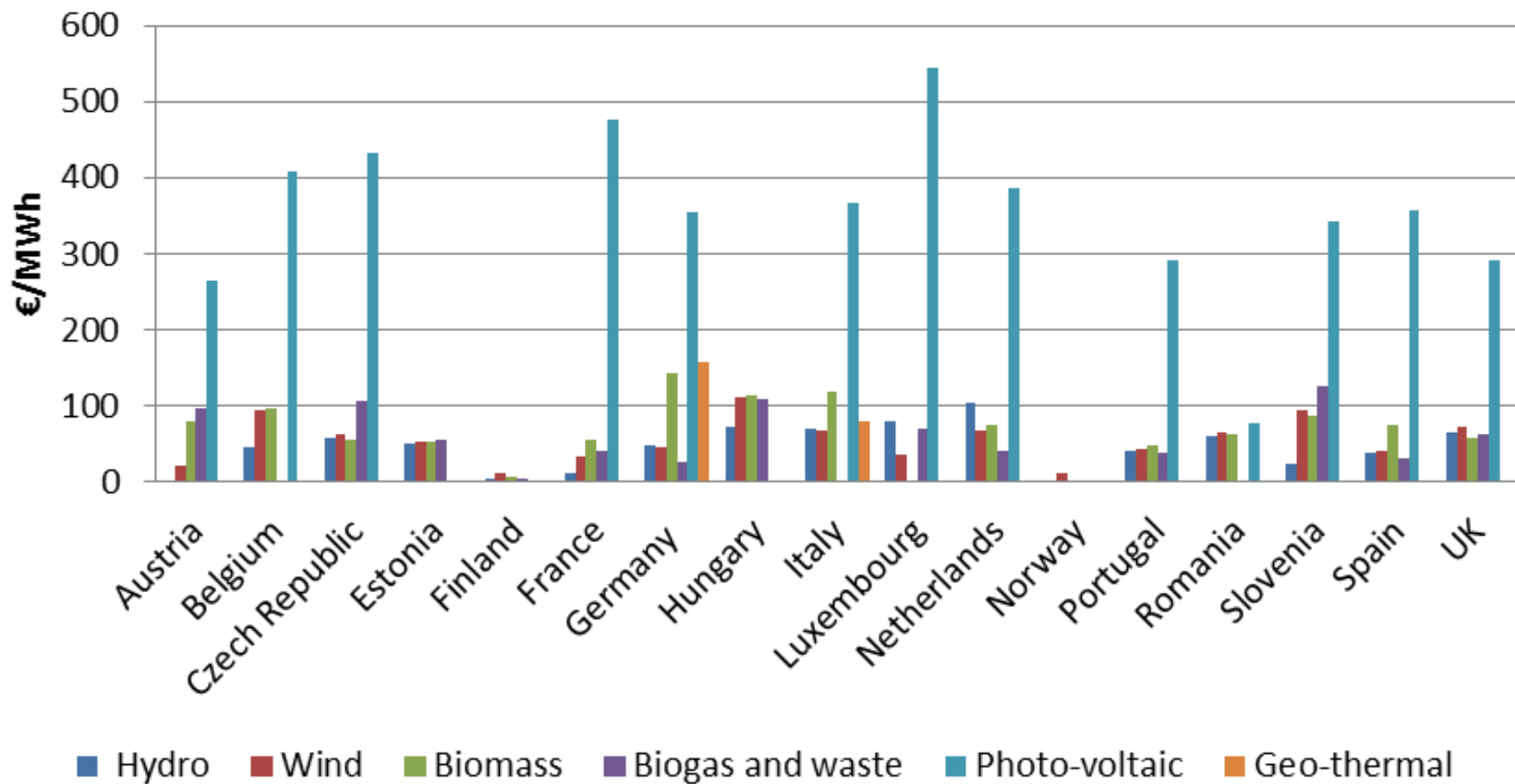
# Costs to consumers



# Facts and Figures

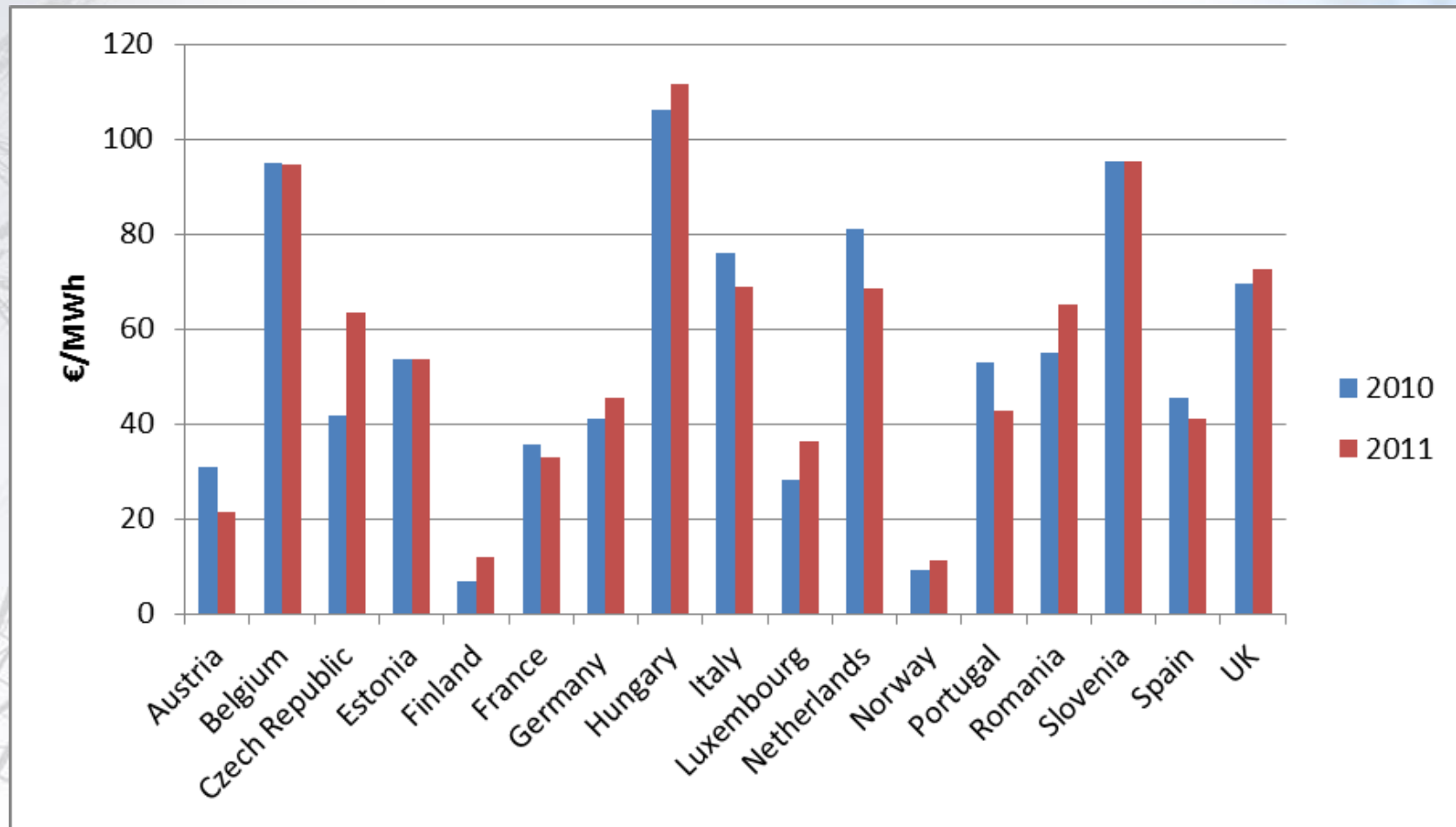
- Of the 18 countries who provided data, support costs (if shared evenly across all consumption)
  - vary from 0.12 to 20.61 €/MWh
  - averaging around 7 €/MWh (2010)
  
- For the 19 countries that provided detailed data on the MWh receiving support, on average
  - 8 % of gross electricity generation receives RES support (2010), and
  - 9 % of final electricity consumption receives support (2010)

# RES support levels by main technology and country (2011)

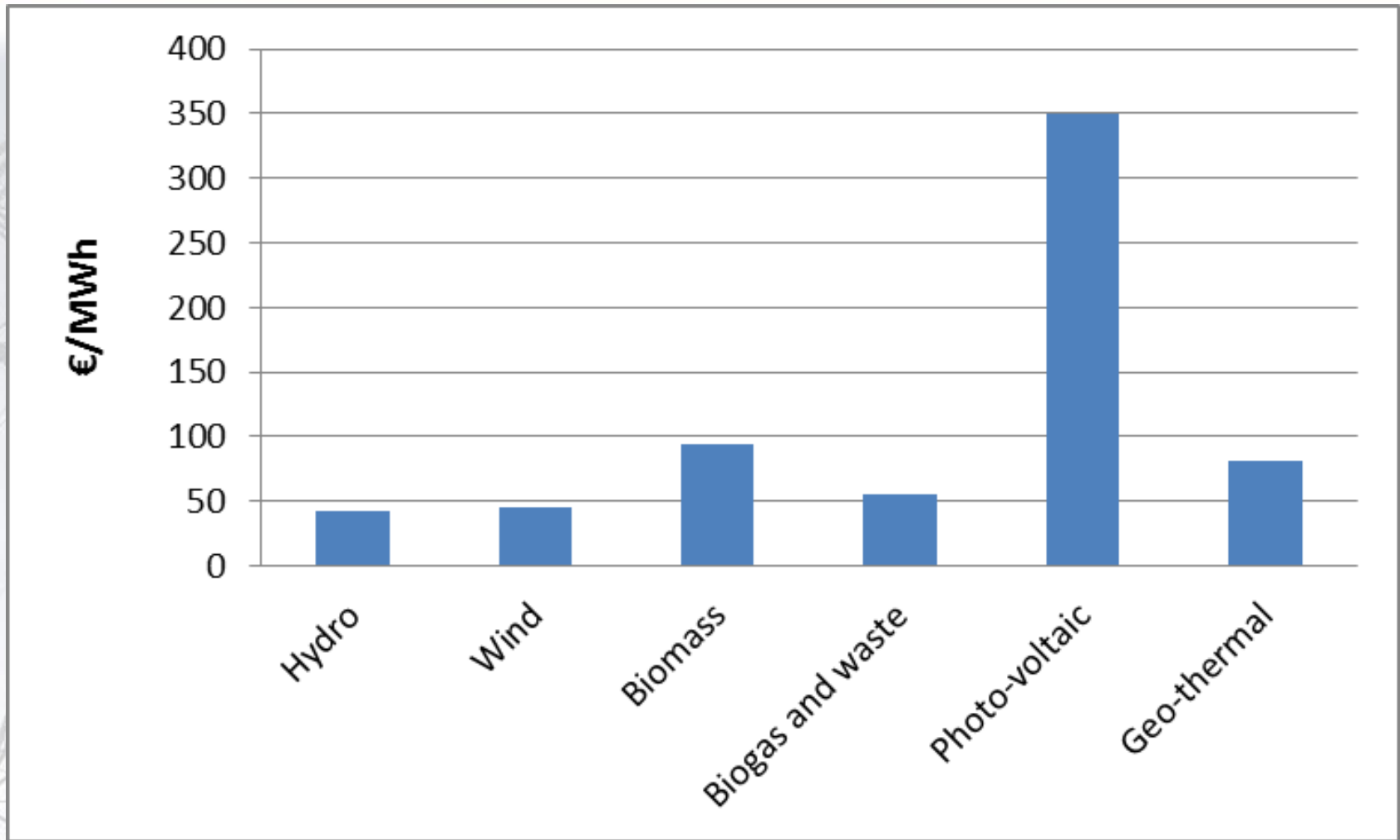


# Comparing support levels - an example

Average support for wind generation (€/MWh in excess of wholesale price)



# Weighted average support by technology (2011)



# Additional info in the report

- Ways of financing national energy efficiency support schemes (2012)
- Ways of financing renewable heating/cooling support schemes (2012)
- Overview of financial responsibility for RES-sourced el. plant imbalances
- Overview of level of priority granted for RES-sourced el. plants when connecting and using the grid
- Overview of type of connection regime for RES



# Implications of non-harmonised renewable support schemes

*Delivering 2020 targets cost effectively*

CEER EUSEW workshop – 25<sup>th</sup> June 2013

# CEER Public Consultation on the implications of non-harmonised RES support schemes (2011-12)

- “Europe is substantially committed to increase the contribution from renewable energy sources (RES) to total energy consumption. In the next ten years, the share of RES in the electricity market is expected to rise from 21% [today] to 35%” (2010 ETC/ACC Technical Paper)
- **Report rationale**
- EU 20:20:20 and ‘Low Carbon Economy Road Map 2050’ targets
- Formal RES Communication 2012
- Commission's intention to produce RES support scheme good practice guidelines (2013)
- TYNDP investment challenge and RES-related ‘bottlenecks’
- RES support schemes (i) can distort the market , (ii) are a key driver for RES deployment/technology innovation and (iii) affect end-user costs so are therefore of interest to energy regulators.

# RES support scheme design elements / CEER questions

- RES support scheme **design** and **application** varies across Europe.....

<u>Type of support</u>		
Price-based scheme		Quota-based scheme
<u>Level of support</u>		
High amount of support provided		Low amount of support provided
<u>Support provision structure</u>		
Fixed rate over time		Variable rate over time
<u>History of support</u>		
Long-term		Short term
<u>Support scheme stability</u>		
Perception of stability		Perception of instability

- **Question 1:** How significant are the impacts of non-harmonisation for the development of RES/RES technologies?
- **Question 2:** In comparison, how significant are the impacts of non-harmonisation of factors *other than support schemes*?
- **Question 3:** Please rank (by importance) the factors of non-harmonisation (e.g. type, level etc)
- **Question 4:** Are there any other/additional significant impacts?

# Importance of non-harmonisation of support scheme factors

- **Scheme stability** considered the most important factor, helping to minimise the detrimental effects of instability on *attracting and retaining* high levels of investment.

Ranking	Factors
Most important	1. Stability
	2. Level
	3. Type
	4. Structure
Least important	5. History

- **Level** considered more important than **type** due to central importance to investment
- Variable responses to importance of **type** of support
- Variable support structures acceptable if rules are **transparent** and **communicated in advance**.
- **Minimal significance** attached to **history of support** (unreliable indicator of future arrangements)



# Why harmonisation?

- **Brings consumer benefits** (through increased liquidity in the system and greater access to competitive tariffs)
- **Reduces system costs** (due to interoperable systems and subsidy structures) and **supports RES integration in delivering strategic goals** (IEM, 20:20:20 and beyond).
- In moving towards the 2020 targets, some Member States may become net exporters/importers of RES. This may result in **benefits from more efficient interactions between RES**, which would be maximised with harmonised support schemes.
- **Non harmonisation** prevents creation of a **'level playing field'** for RES industries/suppliers and hampers cross-border engagement with Third Country partners because it:
  - creates unnecessary complexity
  - introduces system redundancy
  - leads to less cost-effective RES solutions

# Why keep the status quo (non-harmonisation)?

- Allows **RES technology choice to be matched with regional supply chain**/workforce skills development needs
- Helps **diversify the RES supply portfolio** for each Member State
- Facilitates **innovation** (between schemes and technologies)
- **Rapid transition to harmonisation** could:
  - increase end-costs to consumers (uncertainty leading to higher costs)
  - lead to an unbalancing of RES sources (impairing ancillary services)
  - have unintended consequences (windfall profits/losses for incumbents)



# Impacts of non-harmonisation of factors other than support schemes

## *Respondents identified:*

- Local terrain
- Connection and charging rules
- Wholesale electricity market arrangements
- Ancillary services
- Social acceptance and permitting
- Subsidies for other technologies

## *Most commonly cited:*

- Level of connection charging and 'rules'
- Time taken to connect (including time and complexity of permitting)
- Balancing regime (becomes increasingly important with harmonisation)

# Wider implications of RES support schemes

## Investment decisions

- Need for a long term vision to support long-term network investment decisions (RES integration is one of the nine investment criteria within the TYNDP)
- The TYNDPs infrastructure assessment helps to identify major RES export areas and understand 'efficient' RES deployment, which in turn helps Member States understand the effect of their support schemes.
- Stability of support scheme = key factor for investment decision
- Support delivered via industrial R&D and public/private innovation programmes (as opposed to generation subsidies)

## Market functioning

- Concerns re: effect on functioning of national and European wholesale electricity markets, although cross-border market distortions not unique to RES support

# CEER conclusions (1)

## ***Significance of RES support scheme characteristics***

- Relationship between stability of support and investor confidence - a cost efficient RES support scheme should not introduce unnecessary policy related risks
- Impacts of specific RES support schemes to other sectors of the economy (job creation, crowding out investment)

## ***Conclusions relating to factors 'other' than support schemes***

- RES support schemes alone will not achieve the efficient deployment of RES, other non harmonised factors need to be considered. These include:
  - Level of connection charging and 'rules'
  - Time taken to connect (including time and complexity of permitting)
  - Balancing regime (becomes increasingly important with harmonisation)
- Framework guidelines and network codes provide the route for addressing these areas

## CEER conclusions (2)

### *Wider considerations relating to efficient realisation of RES targets and long term vision and stability of support*

- Harmonising support schemes (without also harmonising the wider system) may impact on the ability of individual Member States to meet their RES targets. This should be considered in any future RES target negotiations (beyond 2020)
- How the transition to harmonisation is realised affects the level of uncertainty and instability created
- The route pursued/decision taken should reflect the trade-off between the need to balance the interests of consumers and the associated impact on investors
- Going forward, the increasing proportion of RES in Member States' fuel mix widens the potential benefits of exploiting efficient interactions between RES

# Open issues and potential next steps

- Possible movement from subsidy-to-market based approaches (e.g. EU ETS)
- Role of Third Package network codes in overcoming barriers (to flexible trading of energy)
- Lack of consensus points to need for further research into ***cooperation mechanisms*** and a **possible regional approach** between full harmonisation and the status quo
- The existence of non-harmonised support schemes in a coupled market may have an impact on market functioning. Whilst impacts are unclear, there is an opportunity to influence network code development in the lead up to 2014.
- The development of the TYNDP may identify areas of 'efficient' RES deployment – This may need to be monitored to help inform the design of support schemes (possible role for ACER/NRAs?)



# Key messages

- Harmonising RES-E support isn't a panacea – with the likely political challenges and disruption it may not be the right time to do this
- Better to signal a clear 2030 direction with pan-EU harmonisation over time
- EC Guidelines a good idea (cautious convergence?) and should encourage regional pilots rather than rapid change
- Any support schemes should acknowledge the rationale that nascent technology should be encouraged to achieve mainstream market presence if it has potential for cost-effective decarbonisation in the future



Thank you for your attention!

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