
Key findings of DiaCore



DiaCore - Final Conference, May 30 2016, Brussels

Mario Ragwitz (Fraunhofer ISI)

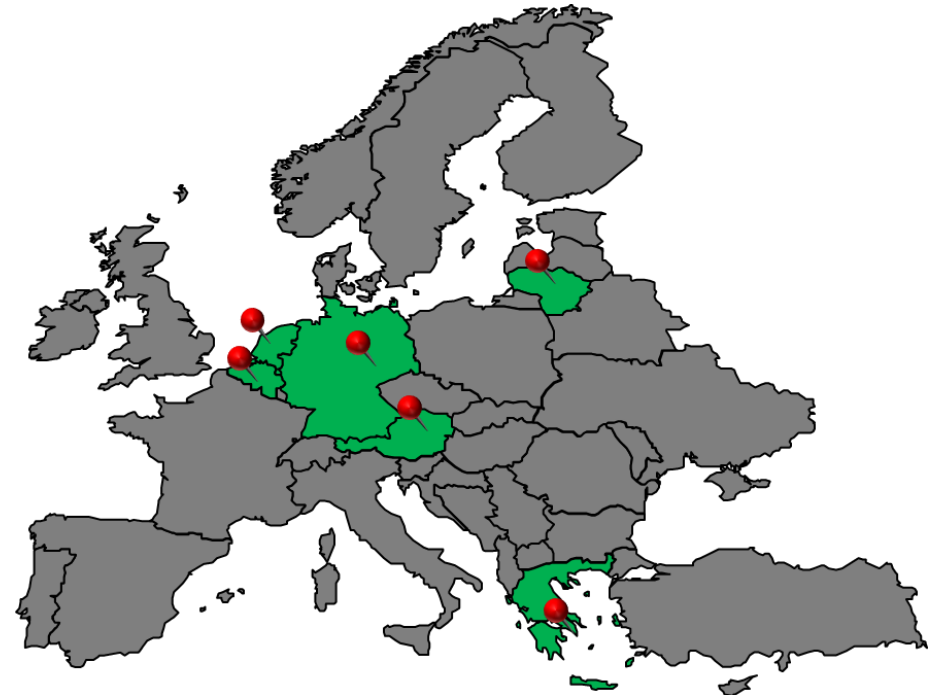


Project background

- Policy needs
 - Monitoring of MS success in meeting 2020 RES targets and modelling of main policy alternatives crucial for future policy development
 - Need for wider convergence in RES support across the EU
 - Unbiased and scientifically robust analysis needed in a sometimes controversial discussion on the optimal support strategy
 - Importance of continuous stakeholder dialogue and involvement of national and European key decision makers
- Target group
 - National and European policy makers, renewable branch organisations, RES generators, energy consumers and suppliers
- Key data
 - Supported by Intelligent Energy for Europe Programme, managed by the Executive Agency for Small and Medium-sized Enterprises (EASME)
 - Project duration: 36 months (Started: 01/04/2013)

Project partners

Fraunhofer ISI (Germany)	Fraunhofer Institute for Systems- and Innovations Research
EEG (Austria)	Vienna University of Technology, Energy Economics Group
Ecofys (Netherlands)	Ecofys Netherlands bv
CEPS (Belgium)	Centre for European Policy Studies
DIW (Germany)	German Institute for Economic Research
Eclareon (Germany)	Eclareon GmbH
UU (Netherlands)	University of Utrecht
NTUA (Greece)	National Technical University of Athens
AXPO (Austria)	AXPO Austria
LEI (Lithuania)	Lithuanian Energy Institute



Key message 1: RES are capital intensive – therefore risk-mitigation is key

Monitor cost of capital (→ 2030 GOV)

- Cost of equity and cost of debt should be monitored every year for each Member State and all capital-intensive new RES
- Disclose diverse financing conditions & impact of policy design and shocks (e.g. retroactive changes)

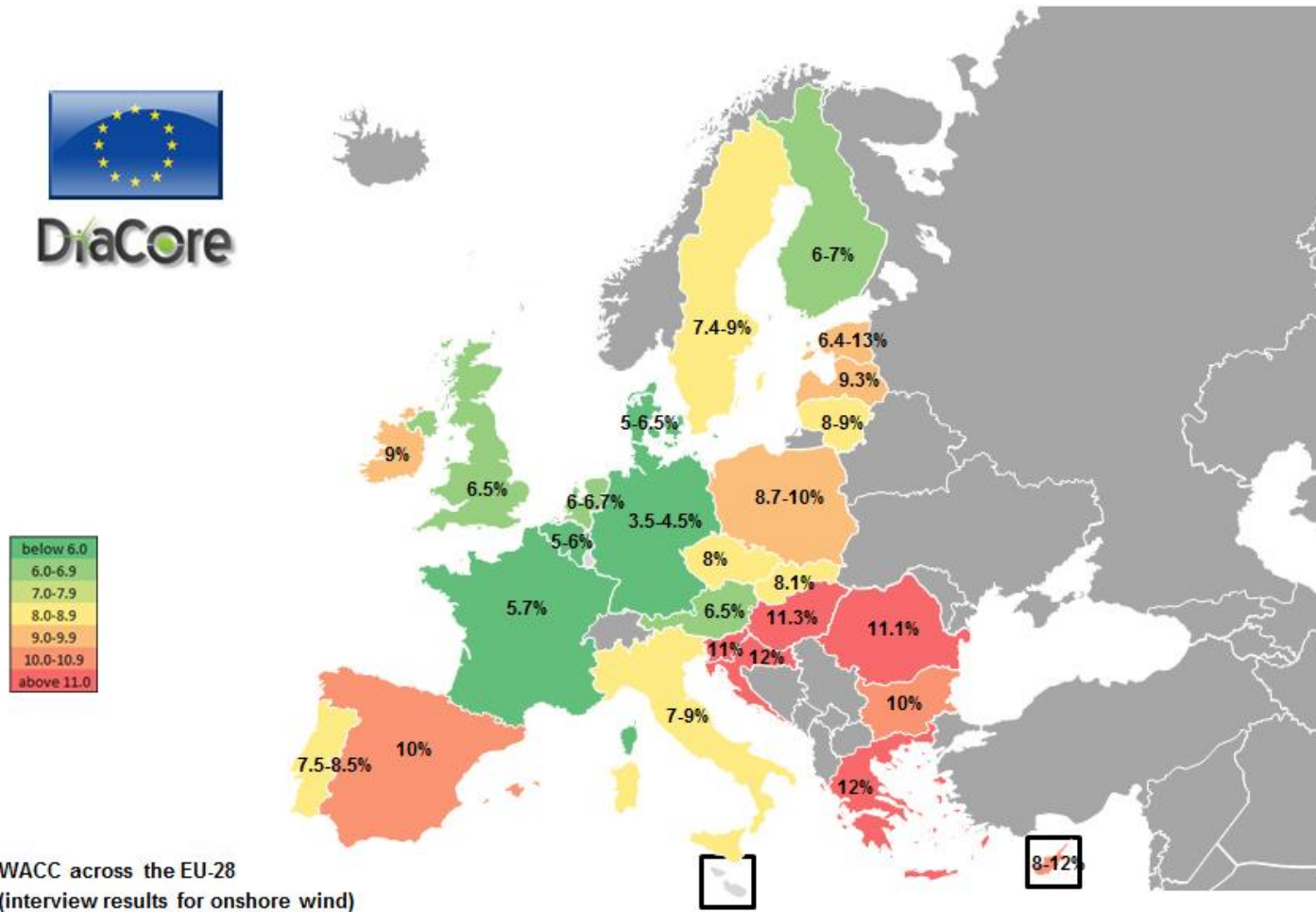
Provide guidelines for risk mitigation in RES policy design (→ RED II)

- Unproductive risks linked to RES policies should be avoided
- General level of remuneration should be locked in with the moment of investment decision

Equalise cost of capital (→ RED II)

- Analyse role of EIB and impact of “Banking Union“
- Training for evaluating RES projects

Evidence 1: Financing conditions for onshore wind



Key message 2: Further market integration is possible

Balance risk exposure and market integration (→ RED II)

- Long-term Contract-for-Difference is also a risk-hedging instrument
- Beneficial for both sides

Monitor market value of RES-E (→ 2030 GOV)

- Discloses cannibalisation effect
- Renewables tend to earn less than average market price with increasing market share

Provide guidance on harmonising CfD design (→ RED II)

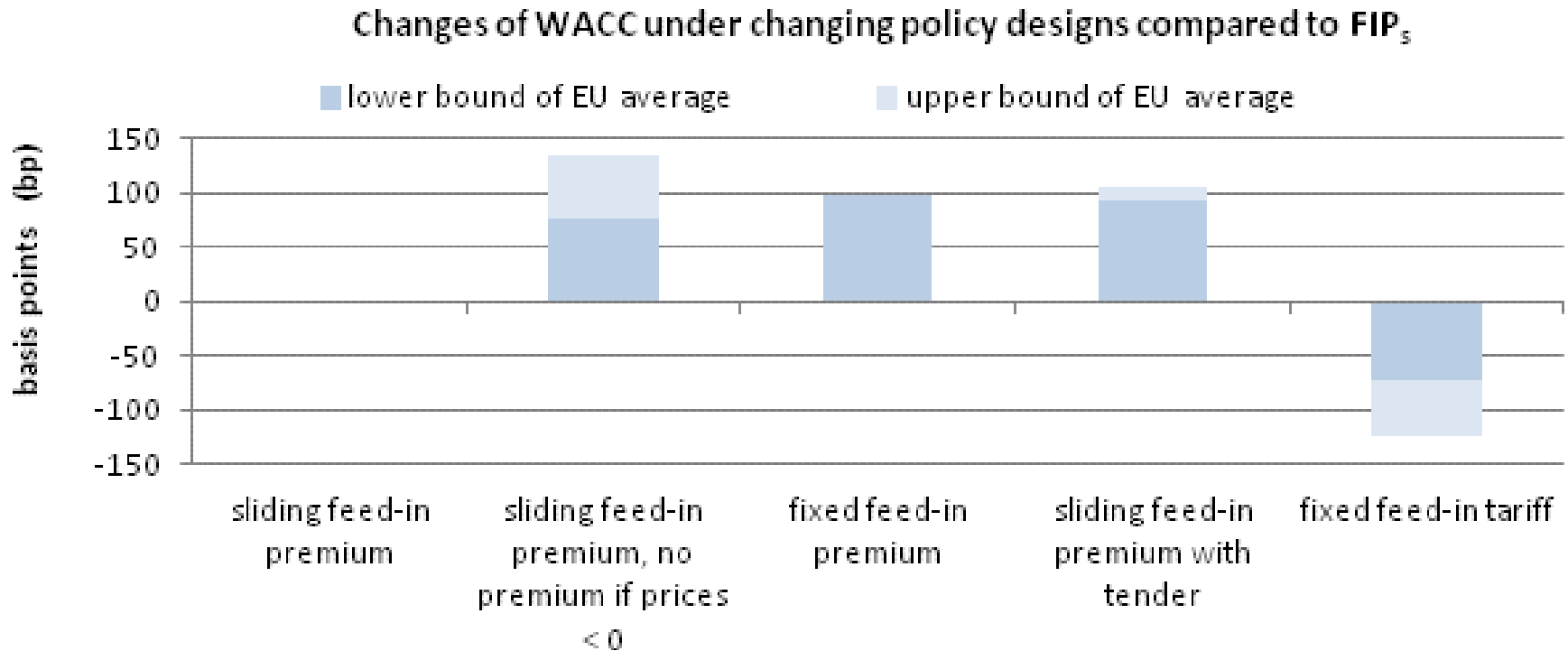
- Reference prices based monthly / annual averages?
- Support during periods of negative prices?
- Correction of premium calculation by market value

Enable phase-out of must-run (→ Market Design)

- Must-run depresses market value of RES
- Essential: all technologies should be allowed to provide ancillary services, not only large centralised power stations

Evidence 2: WACC is a function of risk exposure

- Policy features for RES market integration should be carefully tested to avoid unproductive risks for RES generators



Evidence 3: CfD design

	DE	DK	FI	IT	NL	UK
Cap + Floor	NO	NO	NO	NO	NO	NO
Sliding/ CfD	YES	YES wind-on	YES	YES	YES	YES
Settlement price	Monthly	Hourly	every 3 months	Hourly / monthly	Annually	Hourly / Season
Profile factor	YES	NO	NO	NO	(YES)	NO
Management Premium	YES (existing plants)	YES	NO	NO	(YES)	NO

Key message 3: Coordinate policies and administrative procedures

Exchange best practice on auction design (→ RED II /EEAG)

- Set reasonable penalty levels
- Analyse the right balance between physical and financial prequalification criteria

Guidance on LCOE calculation (→ RED II /EEAG)

- Needed for determination of ceiling prices in auctions and for plants and technologies where auctioning does not apply

Technology-neutral vs. technology-specific (→ EEAG)

- Suitability of technology neutrality depends on the technology portfolio (steepness of supply curve)
- Member states should remain flexibility to opt for either of the two options

Enforce RES-H obligations in existing buildings (→ RED II)

- RES-H building obligations in new buildings should be extended to existing buildings, which is not the case in most member states

Key message 3: Coordinate administrative procedures

Spatial planning (→ RED II)

- Define priority areas for RES-E installations (centralised definition)
- More guidance and support should be given to local administrations to handle the process

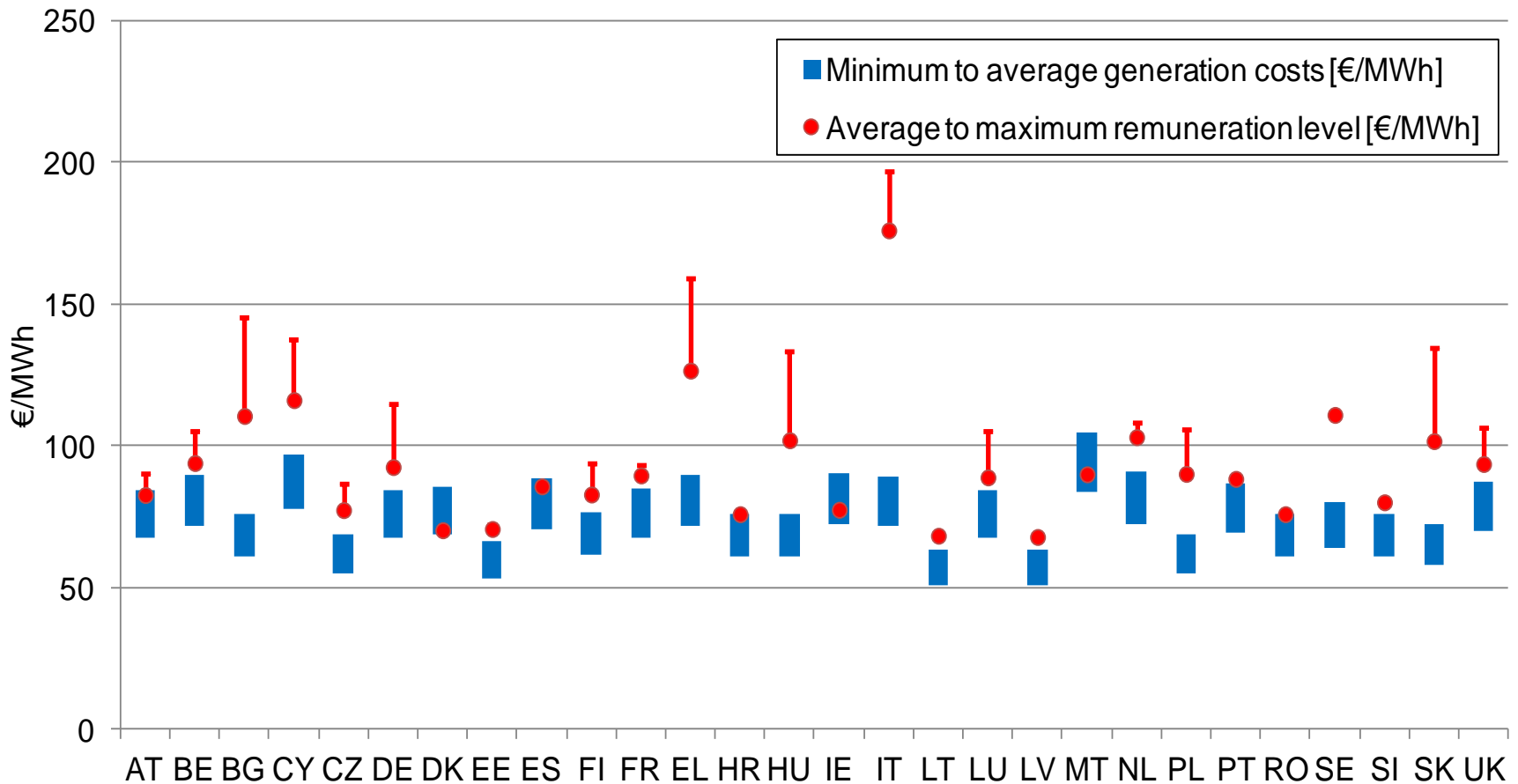
Administrative procedures (→ RED II)

- Major differences in duration of administrative procedures still exist
- Maximum duration of processes and appeal procedures should be defined

Grid connection (→ RED II)

- Shallow grid charging more suitable
- Maximum duration of grid connection and appeal procedures should be defined

Evidence 3: coordination of ambition level and prices would be beneficial



Key message 4: Limit the costs of target achievement

Set reliable long term targets at MS level (→ RED II)

- Targets are needed to coordinate simultaneous generation and grid investments
- Technology supply chain needs sufficient planning horizon

Frequent information exchange between MS (→ RED II)

- More frequent information exchange between Member States may avoid the costs of boom and bust cycles (PV example)

Coordination before harmonisation (→ RED II)

- Full harmonization of support systems is not an end in itself
- Sustainability criteria for solid biomass and liquid biofuels for RES-E/H&C

Total policy costs remain moderate if barriers are mitigated

- If the list of measures for better coordination and barrier mitigation is implemented costs of target achievement will be below 0.5% of EU GDP in 2020 and below 0.2% of GDP by 2030

More information:

<http://www.diacore.eu/>

WELCOME TO OUR WEBSITE

We welcome you to the Project "Policy Dialogue on the assessment and convergence of RES policy in EU Member States", started in April 2013 and carried out under the Intelligent Energy – Europe programme.



DIA-CORE intends to ensure a continuous assessment of the existing policy mechanisms and to establish a fruitful stakeholder dialogue on future policy needs for renewable electricity (RES-E), heating & cooling (RES-H), and transport (RES-T). Thus, **DIA-CORE** shall facilitate convergence in RES support across the EU and enhance investments, cooperation and coordination.

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