# Design and impact of a harmonised policy for renewable electricity in Europe


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Co-funded by the Intelligent Energy Europe
Programme of the European Union

# Aim of this workshop & beyond2020



## Core objective of the project

◀Look more closely beyond 2020 by *designing & evaluating feasible pathways of a harmonised European policy framework* to support RES in general & RES-E in particular

◀Contribute to the forming of a *European vision of a joint future RES policy framework* in the mid- to long-term

## Aim of today

*This conference* is dedicated to present and discuss draft final results & findings with a broad set of stakeholders. Among others this will provide also useful input to the final steps to be taken within this project…

In focus of forthcoming presentations:

- ◀Europe's RES strategy beyond 2020
  - ◀Possible/feasible **RES policy pathways for the period beyond 2020**
- ◀**Design elements** for support instruments and **policy evaluation criteria**
  - ◀**Interactions** between **RES policies** and **electricity markets**
- ◀**Interim results** from the assessment of harmonisation pathways from a **juridical, strategic** and **techno-economic** viewpoint

Project coordination:
Energy Economics Group (EEG)
Vienna University of Technology

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IEE-project beyond2020, project duration: from 07/2011 to 12/2013,
Final Conference Brussels, 22nd of October 2013 … Slide 2

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# Background



## Underlying problems / opportunities

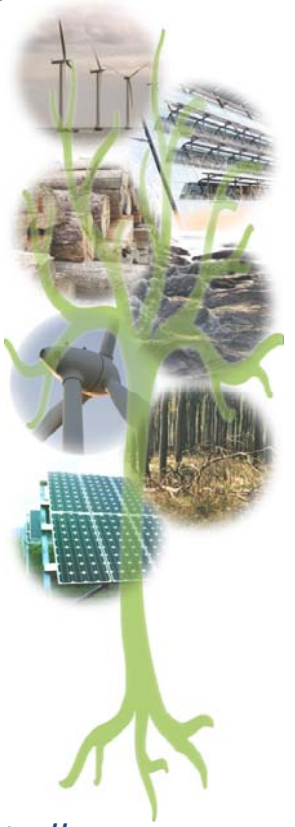
Aim of *this project* is to *look more closely beyond 2020* ***well in time!***

### beyond2020 *tackles* ***problems …*** *With Directive 2009/28/EC the European Parliament and Council have laid the grounds for the policy framework for renewable energies until 2020 …*

◀… but the *debate on (early) harmonisation of RES support has not ended* which *creates uncertainty* among market actors.

◀Proposal for RES-E harmonisation have *focused mainly on quota systems / certificate trading.*

◀*Previous evaluations of harmonisation have often been too idealistic / theoretical* – specifically juridical feasibility and political practicability or risks arising from policy or market failures have been, if at all, only considered insufficiently.



### beyond2020 *offers* ***opportunities …***

◀Assessment of *a broad set of policy options* for a harmonisation of RES(-E) support

◀*Evaluation* of policy proposals *from various viewpoints* - i.e. costs & benefits, strategic impacts, political practicability, juridical implementation, market integration aspects.

◀*Focus* on *beyond 2020*, but also *transition phase before 2020* tackled.

◀Contribution to the debate *whether a harmonisation of RES support appears beneficial at all*



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## Main steps

◀*Elaboration of feasible policy approaches for a harmonisation* of RES support, involving various policy paths

◀*Impact assessment* to analyse and contrast different *instruments* as well as corresponding *design elements*, involving ...

- ◀a *quantitative model-based analysis* of future RES deployment and corresponding cost, expenditures & benefits based on the Green-X model
- ◀a detailed *qualitative analysis*, focussing on *strategic impacts*, *political practicability* and *guidelines for juridical implementation*.
- ◀Derivation of *prerequisites* for and *trade-offs* with the future European *electricity market*.

◀The project will be embedded in an intense and interactive dissemination framework.

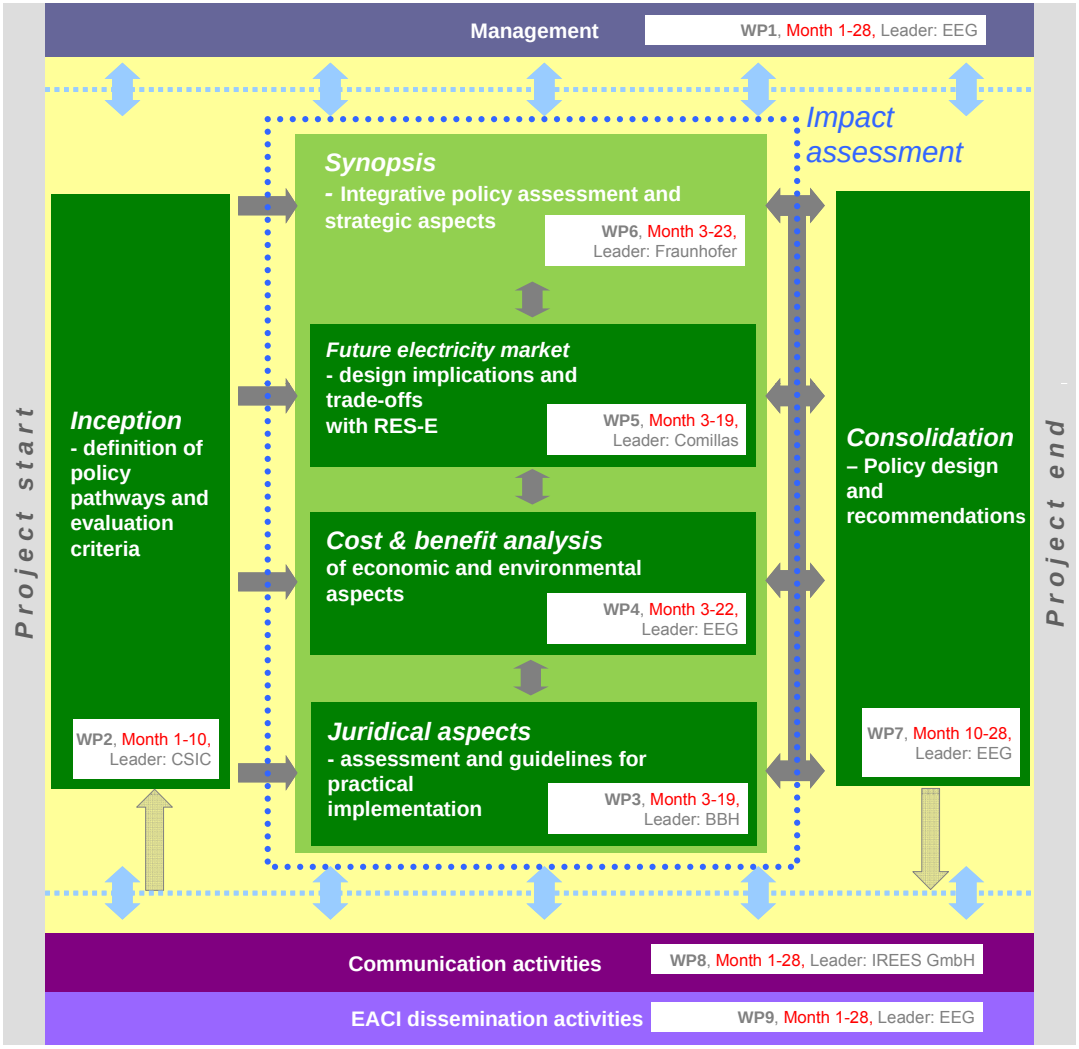


Figure: Flow chart of beyond2020

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# Expected results



## Expected results

beyond*2020* aims to provide **the analytical knowledge base** for the **design, evaluation and implementation** of policy proposals **for a harmonisation of RES support** in Europe.

*A broad set of results will be derived within* beyond*2020, available in form of comprehensive project reports, accomplished by brief summaries of key findings and presentations at workshops as well as via scientific papers …*

### Key outcomes of beyond*2020* are:

- Review report on *interactions* between assessed *RES-E support* instruments and *electricity markets*
- Identification of *potential areas of conflict of a harmonised RES support scheme with European Union Law* as well as derivation of legal requirements and recommendations
- A *Multi Criteria Decision Analysis (MCDA)* tool used to evaluate the policy proposals
- ***The final outcome*** will be *a* ***fine-tailored policy package***, offering:
  - A *concise representation of key outcomes* and a detailed comparison of *pros and cons of each policy pathway* (incl. quantitative and qualitative results)
  - Detailed *roadmaps for practical implementation* of each assessed policy pathway
  - Outline of a *legal draft for the implementation of key provisions* of two recommended policy pathways



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# nda for toda

(9:55) Europe's RES strategy for 203
***Oyvind Vessia, European Commission, DG ENER***

(10:20) European RES policy beyond 2020 from an energy company/utility perspective
***Bugra Borasoy, EnBW***

(11:20) Policy criteria and possible policy pathways for harmonization
***Christian Panzer, EEG***

(11:40) … future exemptions of EU energy intensive industrie
***Felipe Toro, IR***

(11:55) Interactions between GHG and RE Energy Policies
***Corinna Klessmann, Ecofys***

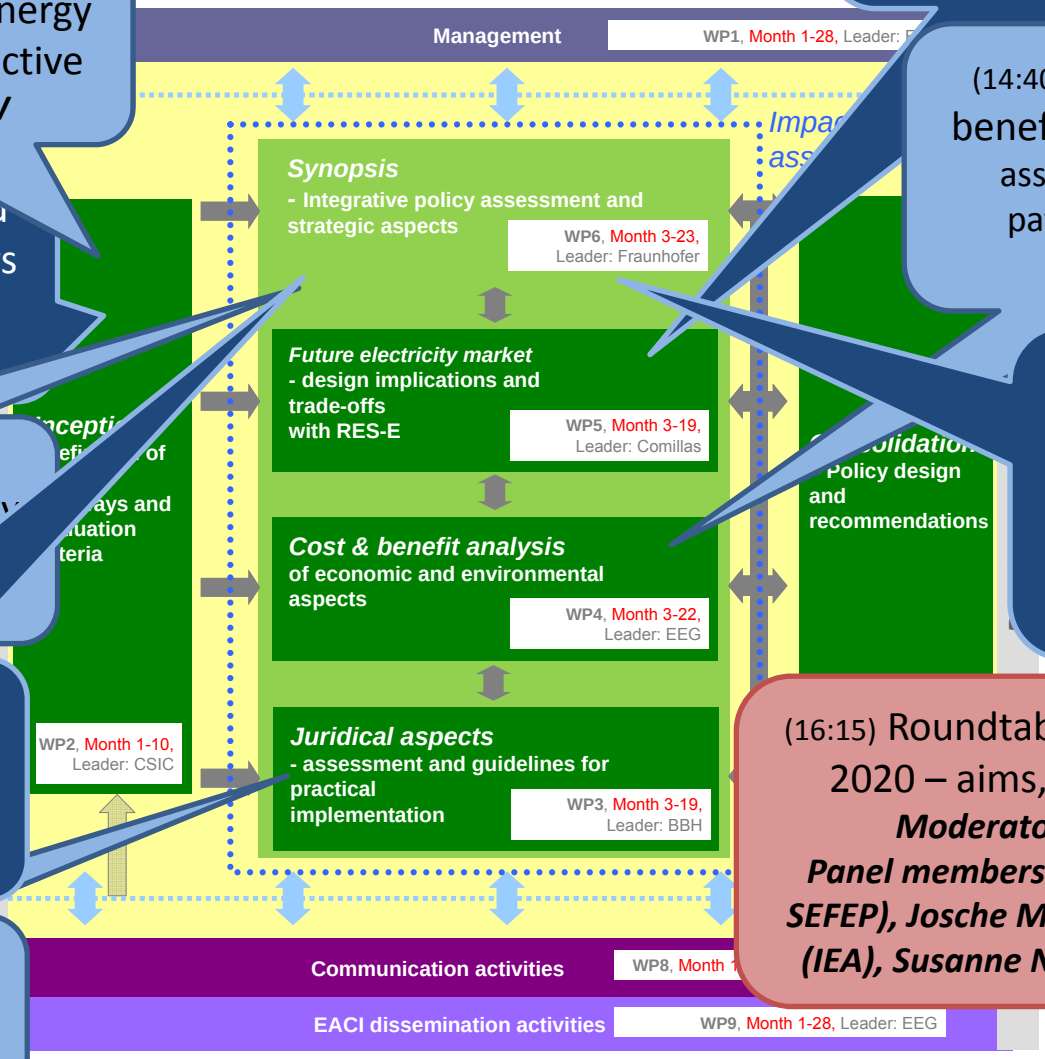
(12:10) Potential areas of difficulty under EU Law
***Angus Johnston & Jana Nysten, UOXF & BBH***

(14:10) Interactions between RES-Policies and Electricity Markets
***Pedro Linares, Comillas & Marian Klobasa, Fraunhofer ISI & Georgios Papaefthymiou, Ecofys***

(14:40) Results of the cost-benefit analysis (quantitative assessment of RES policy pathways beyond 2020)
***Gustav Resch, EEG***

(15:10) Integrated policy assessment and strategic aspects
draft final results
***Simone Steinhilber, Fraunhofer ISI***

(16:15) Roundtable: RES policy beyond 2020 – aims, needs, next steps?
***Moderator: Mario Ragwitz***
***Panel members: Raffaele Piria (former SEFEP), Josche Muth (EREC), Paolo Frankl (IEA), Susanne Nies (Eurelectric – t.b.c.)***




gure: Flow chart of beyond2020

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# Overview on RES policy pathways beyond*2020*

| *Degree of harmonisation* | *Characterisation* | | *Instrument* | **FIT** (feed-in tariff) | **FIP** (feed-in premium) | **QUO** (quota system with uniform TGC) | **QUO banding** (quota system with banded TGC) | **ETS** (no dedicated RES support) | **TEN** (Tendering for large scale RES) |
|---|---|---|---|---|---|---|---|---|---|
| **Full** | •EU target<br>•One instrument | | | 1a | 2a | 3a* | 4a | 5* | 6<br>•Sensitivity to 7 (national support, but harmonisation for selected technologies) |
| **Medium** | •EU target<br>•One instrument<br>•Additional (limited) support allowed | | | 1b | 2b | 3b | 4b | | |
| **Soft** | •National targets<br>•One instrument<br>•MS can decide on various design elements incl. support levels | | | 1c | 2c | 3c | 4c | | |
| **Mini-mum** | •With minimum design standards for support instruments | •National targets<br>•Cooperation mechanism (limited/strong RES cooperation) | | 7*<br>**Ref**erence (national RES support with cooperation)<br>*(without/with minimum design standards)* | | | | | |
| **No** | •No minimum design standards for support instruments | | | | | | | | |

Used for assessment of grid- and electricity market related aspects & interactions

Notes: *pre-assessment undertaken at the interim stage

# Partners & Contact



## Partners

| | |
|---|---|
| Energy Economics Group / TU Wien | Vienna University of Technology, Institute of Energy Systems and Electrical Drives, Energy Economics Group (EEG), Austria *(Project coordinator)* |
| Fraunhofer ISI | Fraunhofer Institute for Systems and Innovation Research (ISI), Germany |
| CSIC | Consejo Superior de Investigagiones Cientificas (CSIC), Spain |
| University of Oxford | University of Oxford, United Kingdom |
| BBH Becker Büttner Held | Becker Büttner Held (BBH), Belgium |
| | Czech Technical University in Prague (CVUT in Prague), Czech Republic |
| axpo | AXPO Austria GmbH (AXPO, Austria |
| ECOFYS | Ecofys b.v. (Ecofys), The Netherlands |
| Comillas | Comillas Universidad Pontificia Madrid (Comillas), Spain |
| IREES | Institute for Resource Efficiency and Energy Strategies (IREES), Germany |
| EnBW | Energie Baden-Württemberg AG (EnBW), Germany |

## Contact

Energy Economics Group

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