

Policy Instruments to Support RE Industrial Value Chain Development (RE-ValuePolicies)

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Introduction to IEA-RETD, the RE-ValuePolicies project and workshop objectives

Presented at the RE-ValuePolicies Expert Workshop

Bonn, 2nd May 2013

Thank you all for being here today!

Outline

1. Introduction to IEA-RETD
2. Framing today's workshop
3. Key characteristics of the RE-ValuePolicies project
4. Overall objective and key questions
5. Why this project?
6. What do we envisage?
7. How to carry out?
8. The workshop today

The mission of IEA-RETD is to accelerate the large-scale deployment of renewable energies

RETD stands for “Renewable Energy Technology Deployment”.

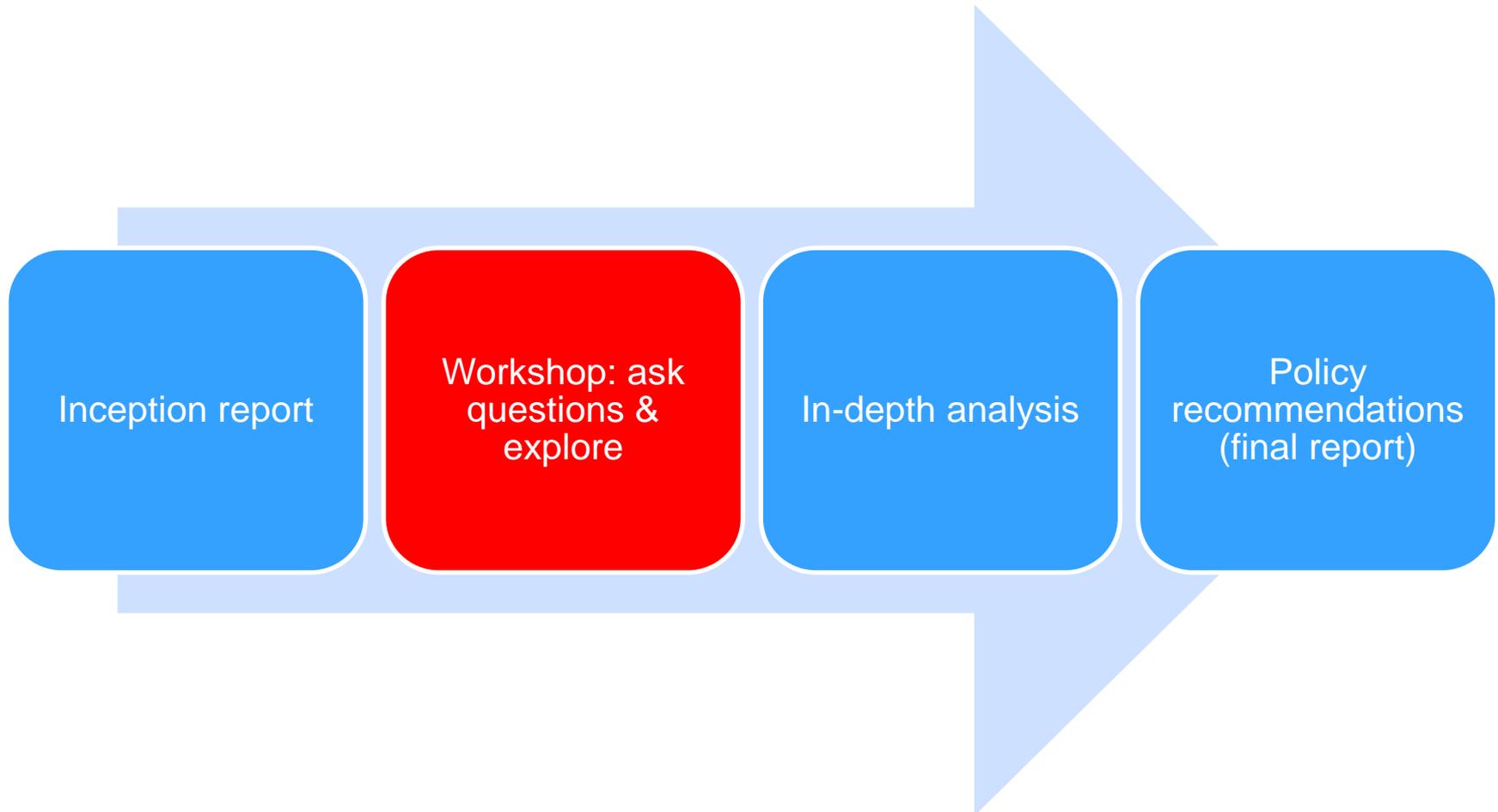
IEA-RETD is a **policy-focused, technology cross-cutting platform** (“Implementing Agreement”) under the legal framework of the International Energy Agency

- Created in 2005, currently **9 member countries**: Canada, Denmark, France, Germany, Ireland, Japan, the Netherlands, Norway, UK
- Hans Jørgen Koch, Deputy State Secretary, Ministry of Climate and Energy, Danish Energy Agency, serves as **Chair of the RETD**
- RETD commissions annually **5-7 studies** bringing together the experience of some of the world’s leading countries in RE with the expertise of renowned consulting firms and academia
- Reports are freely available at www.iea-retd.org
- RETD organizes **workshops** and presents at international events
- **IEA-RETD**: act as a **catalyst in awareness- and policy making** processes, **4** in- and outside IEA

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Framing today's workshop



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Policy Instruments to Support RE Industrial Value Chain Development (RE-ValuePolicies)

- IB: GWS Institute for Economic Structures Research, German Development Institute (DIE) and Fraunhofer ISI
- PSG: Henriette Schweizerhof, Georgina Grenon, Michael Paunescu, Kaoro Yamaguchi, Sonja Röder, Rabia Ferroukhi (IRENA), Sascha van Rooijen
- Timing: February-July 2013
- Kick-off meeting held on February 26th 2013 in Bonn, back to back with the IRENA Economic Value project meeting
- Building on recent IEA-RETD work: FINANCE-RE, EMPLOY, RE-SUPPLY
- Main deliverables:
 - A stand alone report presenting a comprehensive overview of the analysis, findings, conclusions and concrete policy recommendations.
 - Input to the IRENA/CEM-MWGSW Economic Value project Chapter 3 'Policies enabling value creation of solar and wind energy'.

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Overall objective

- The study aims assess **cross-cutting policy instruments**

- structural policy
- labour market policy
- research & innovation policy
- industrial policy
- export policies, etc.

which could **complement** the currently used set of **RE policies**, in order to enable countries to **maximize the economic benefits** the further development of the RE industry

- Policies

- Potential for economic value creation along the value chain (niches)

Key questions

- What is the impact of RE deployment and the RE sector on **economic value creation**?
- How can **policy instruments** (structural policy, labour market policy, research & innovation policy, industrial policy, export policies) facilitate the development of a domestic RE sector and enhance this impact?
- How do these instruments **interact** at national and international level?

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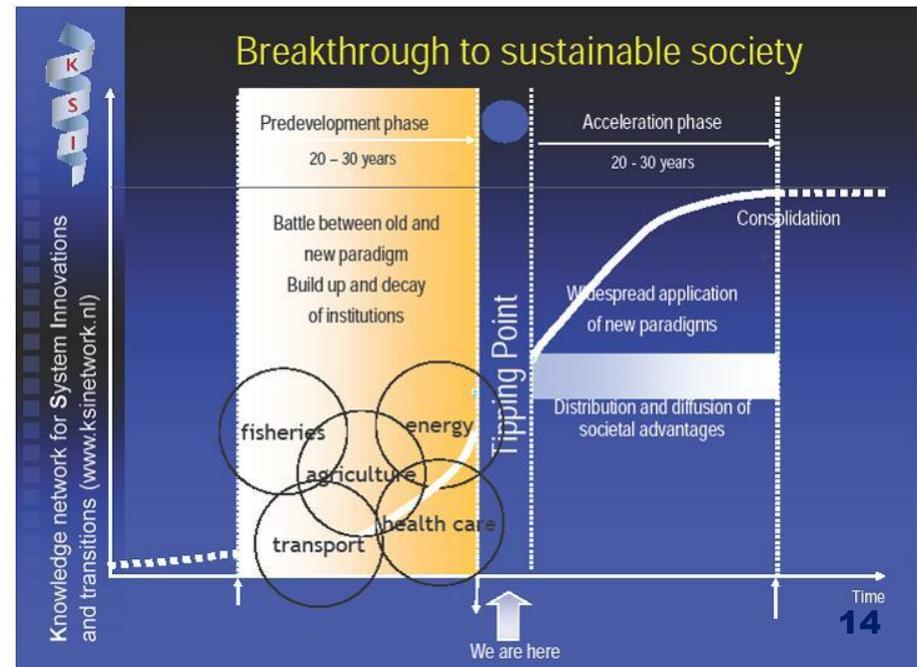
Why this project?

- *“Countries must look to and support that entire value chain of players in the clean energy space—to strengthen the roles of universities, manufacturers, supply chains, financing entities, developers, installers, local governments, and customers in clean energy market development.”* (source: FINANCE-RE, see: <http://iea-retd.org/archives/publications/finance-re>)
- *“But, in the end, if countries do not look at clean energy as a form of industrial policy or an economic competitiveness strategy, they might well fall short of reaching the potential to scale up technologies to achieve economic benefit from them, while collectively failing to reduce emissions of greenhouse gases as well.”* (source: FINANCE-RE, see: <http://iea-retd.org/archives/publications/finance-re>)
- *“Governments are recommended to treat renewable energy as a strategic choice and develop economic policies along the line of the full value chain from innovation to deployment and export.”* (source: FINANCE-RE Workshop London, see: <http://iea-retd.org/archives/ongoing/finance-re-2>)

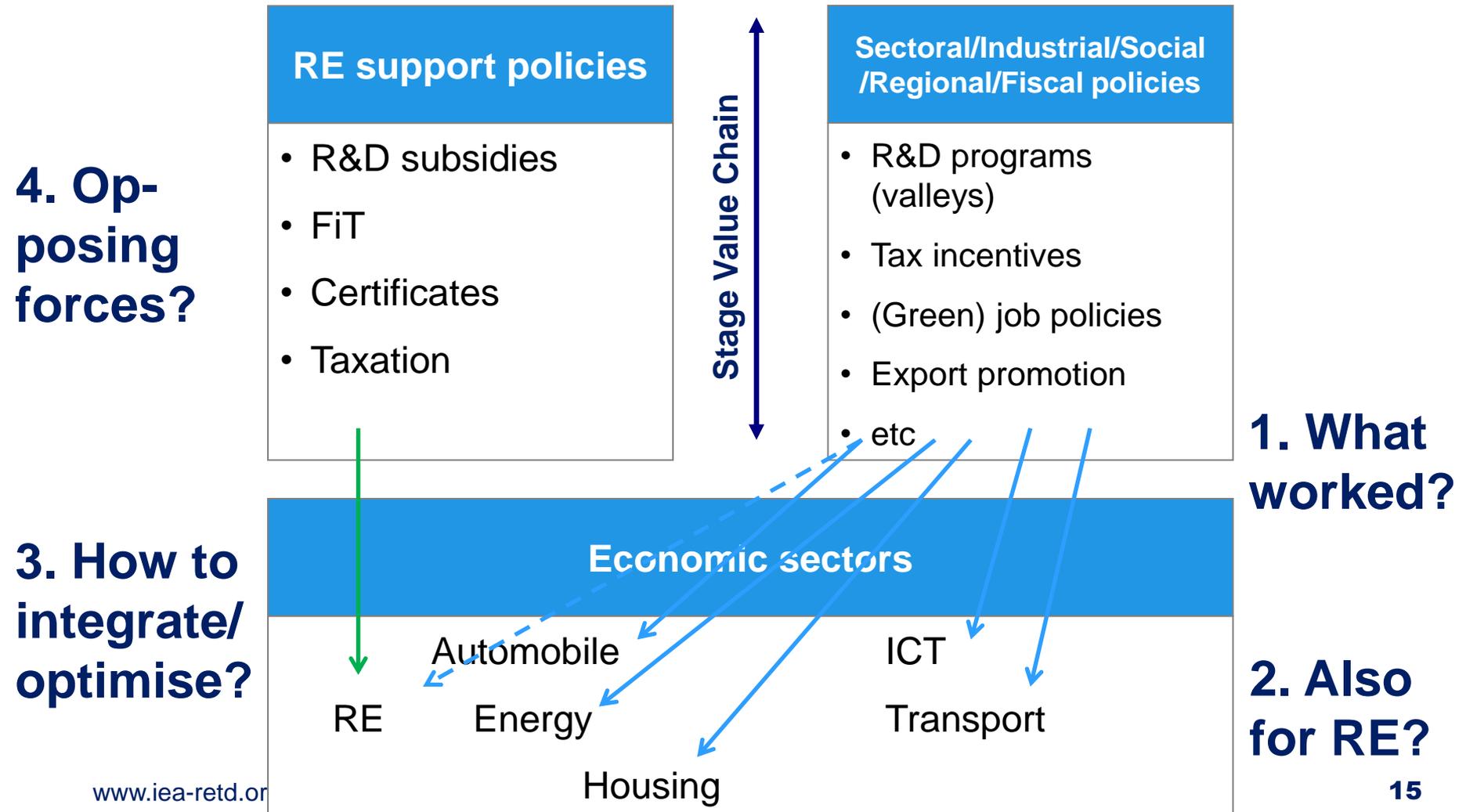
Why this project?

- RE grew with RE deployment support policies (underlying objectives: environment, climate, security of supply)
- RE reached a new stage -> matureness -> costs declined / penetration rates increased -> became an industry sector as such -> need for (more mature) (additional) industry policies

- Development: RE as environmental solution -> mature economic sector**
- Renewable energy: from 'Alternative Energy' -> 'Mainstream Energy'**
- Rethinking on RE policies**



Why this project?



Why this project? - Simplified summary

Key words in the RE-ValuePolicies study: industrial development

IB is knowledgeable on **industrial value chain development**, to answer the following questions related to the non-RE sector development:

- What worked in other sectors?
- Could it work in the RE sector?
- How does it fit with the current policies?
- Which forces counteract the RE deployment?

IB is knowledgeable on **value chains of different RE technologies** to answer the questions above against the **potential for economic value creating opportunities** (where in the chain in the respective country are the economic value creation opportunities/niches?)

Answers as specific and disaggregated as possible (technology, value chain stage, country, timing, etc) -> no general messages!

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What do we envisage? – Elements of the approach

- Give an overview on value creation opportunities along the RE value chains of the RE sector (manufacturing, but also project developers, O&M, finance and public sector).
- Provide insight in possible ways to find “the right niches” at country level. In what ways can countries determine in which industries or clusters of industries they can be competitive, and which not?
- Provide an overview on the different policy areas that directly or indirectly influence RE industrial development, e.g. innovation, labour market, industrial, research or direct deployment policy instruments.
- Provide lessons learnt on the industrial development of other sectors (e.g. housing, transport) which could be of use for maximising the economic benefits from the RE industry.

What do we envisage? – Elements of the approach

- Present and compare policy instruments that influence the creation of RE industries and analyses their respective impact on economic value creation.
- Assess the economic impact that these policy instruments have had in different country and/or regional settings (building on case studies) taking into account a country's overall economic setting. Analyse lessons learnt on policy instruments in conjunction with the private sector (e.g. PPPs).
- Assess the interaction of these policy instruments at the international level, including the role of trade/exports.
- Provide policy recommendations on which policy instruments (including PPPs) might be best suited for certain countries or regions.

What do we envisage? – Focus & boundary setting

- Qualitative assessment. No modelling is foreseen in this project
- RE Technologies: primarily focus on electricity production by solar (PV and CSP) and wind (onshore and offshore) energy technologies. More general recommendations for other renewable energy technologies (different forms of biomass technologies, hydropower, geothermal, or f.e. new PV applications, etc.)
- Time horizon: policy recommendations will target the short term (up to next 5 years) and mid term (5 to 10 years) period
- Geographical scope: primarily on OECD countries, complemented with more general recommendations for non-OECD countries
- Case studies: OECD countries complemented with a limited number of representative non-OECD countries, such as China, India, Brazil or MENA countries, on which broader conclusions for other non-OECD countries can be drawn

What do we envisage? – Focus & boundary setting

- Different categories of countries for assessment and policy recommendations, such as: (1) relatively high shares of renewables, (2) moderate shares of renewables, and (3) relatively low shares of renewable in the total energy mix
- Target audience: policy makers at national, regional and international level
- Target audience: the study intends to provide useful guidance to various countries that aim to accelerate their RE support, and in particular aim to complement their overall RE support policies with policies especially enabling an RE sector development
- Non-RE sectors: a comparison with policies used in other economic sectors, including the lessons learnt, forms part of the scope of this study
- Building on recent IEA-RETD work: FINANCE-RE, EMPLOY, RE-SUPPLY

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How to carry out? – Task 1: Inception paper

To be included:

1. A broad and thorough view of the possible policies along the line of the value chain
 2. An overview of policies used in other sectors, including the lessons learnt and recommendations for the RE sector development
 3. An estimation of the most important value creation opportunities of each of the value chains of the various RE technologies, with a focus on solar and wind technologies
 4. Insight into the main potential economic benefits, possibly presented in matrixes (per technology, per element of the chain, per country category)
- The scope and the level of detail of the inception paper should make it possible to make a profound choice for the in-depth analysis, including the case studies, in the second phase of the project. The paper also serves as a guiding document for the workshop to be held at the beginning of the second phase of the project.

How to carry out? - Task 2: Expert Workshop

- Today: Bonn, May 2nd 2013
- Main objectives:
 1. test the findings of the inception paper, and
 2. gather input for the third task of the project

How to carry out? – Task 3: Final deliverables

- Based on the inception paper and the expert workshop, an in-depth assessment of the possible sector policies which could be used to further develop the RE sector in different (categories of) countries will be carried out, resulting in:
 - A stand alone report presenting a comprehensive overview of the analysis, findings, conclusions and concrete policy recommendations.
 - Input to the IRENA/CEM-MWGSW Economic Value project Chapter 3 ‘Policies enabling value creation of solar and wind energy’.
 - A PowerPoint presentation summarising the methodology and key findings.
 - A 1-2 page Policy Brief for decision makers.

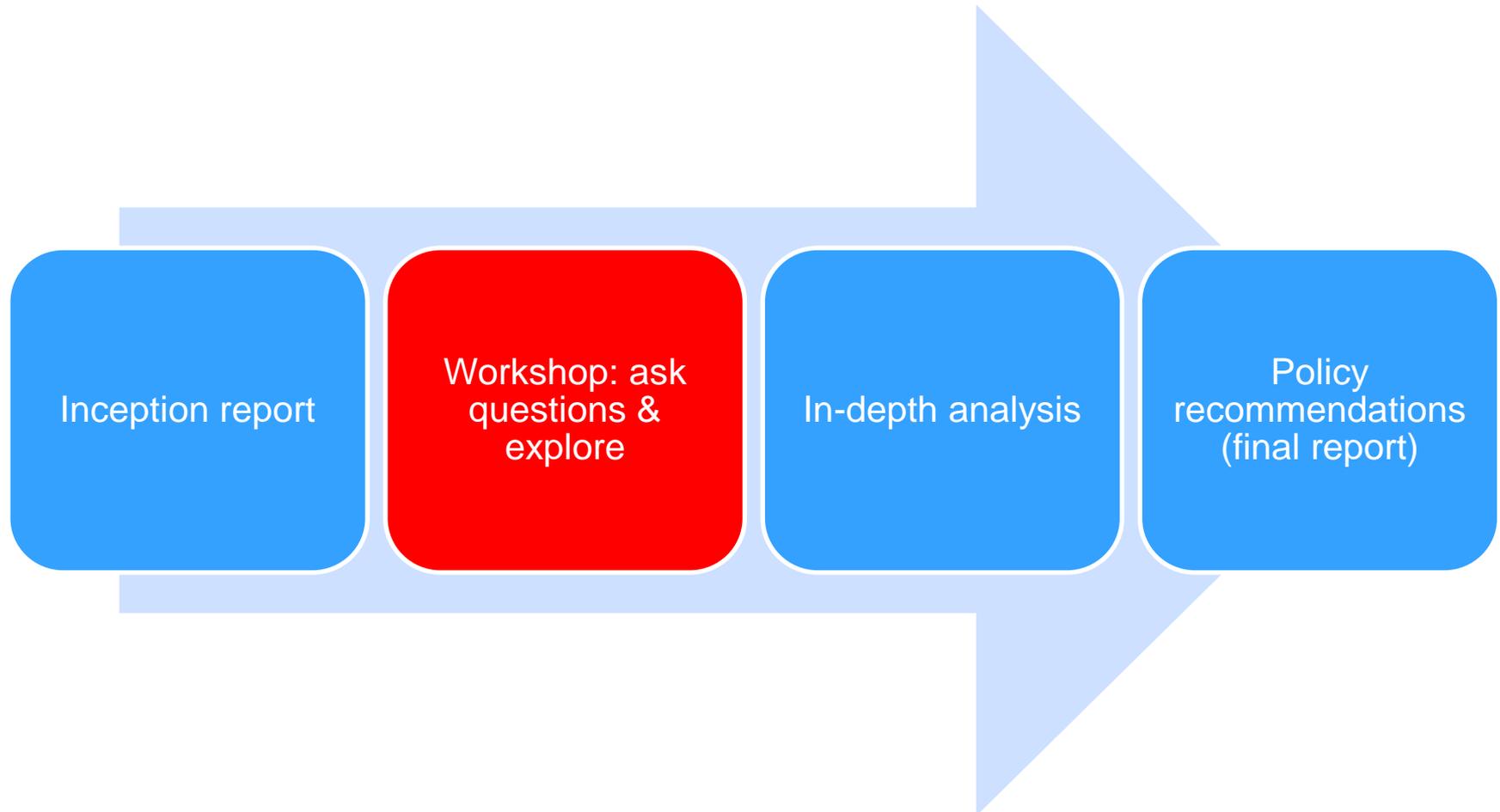
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The workshop today

- Exploring character
- Not too much focus on policy solutions at this stage
- Brainstorming in nature:
 - Is the Inception Report targeting the right issues?
 - What kind of questions do arise after reading the report?
 - What is not clear enough?
 - Are topics overlooked?
 - Are things not correctly reflected?
 - What do you find the most important messages?
 - What are the most pressing issues?
 - Were you surprised by certain parts?
 - What are important questions to answer in the third stage of the project?
 - Which case studies to select?
 - Etc.

Framing today's workshop





THANK YOU!

For additional information on RETD

Online: www.iea-retd.org
Contact: IEA_RETD@ecofys.com