

# Fostering RE deployment

Lessons learnt from IEA-RETD

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*Supporting deployment of low-carbon technologies in the ETC and SEMED regions*

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**IEA-RETD**   
Renewable Energy  
Technology Deployment

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

RETD stands for “Renewable Energy Technology Deployment”.

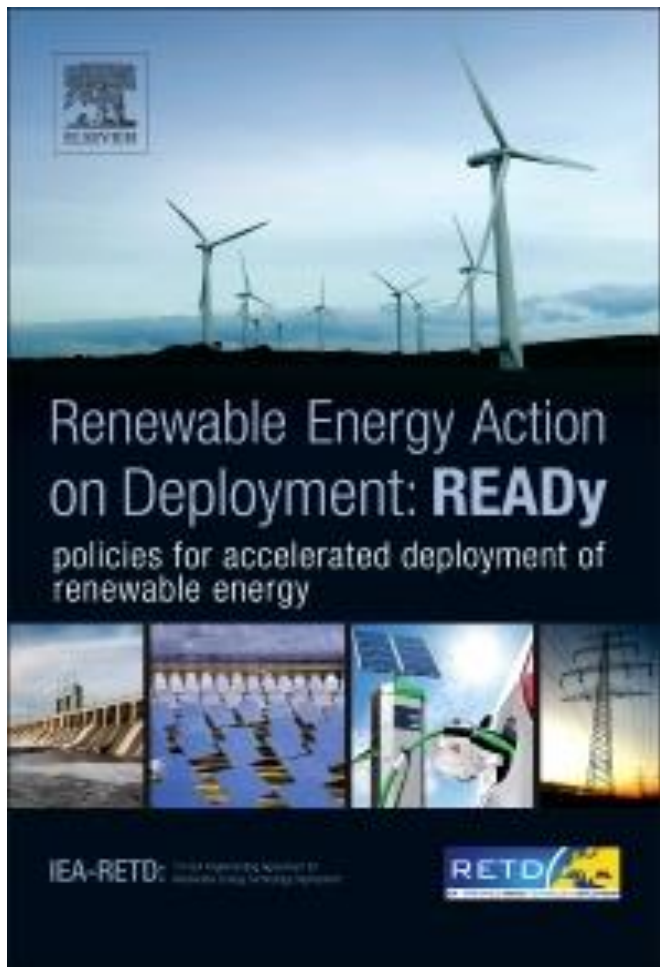
IEA-RETD is a **policy-focused, technology cross-cutting platform** (“Implementing Agreement”) under the legal framework of the International Energy Agency

- Created in 2005, currently **8 member countries**: Canada, Denmark, France, Germany, Ireland, Japan, Norway, UK. European Commission will join in 2015
- IEA-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 and handbooks are freely available at [www.iea-retd.org](http://www.iea-retd.org).
- IEA-RETD organises **workshops** and presents at international events.

## Key challenges & opportunities for an accelerated RE deployment

- Economic / societal justification for RE support
  - Jobs & economy
  - Externalities & co-benefits
  - Innovation
- System integration
  - Across sectors
  - Across energy carriers
  - Across regions
  - Across supply and demand
- Financing renewable energy deployment
  - Business case
  - Cost of capital and policy instrument design
- Communication / public acceptance

## Policies for accelerated deployment of renewables





## **Alliance building**

Build alliances and reach agreements among policy makers and with relevant stakeholders including industry members, consumers, investors, and others.



## **Communicating**

Communicate knowledge about renewable energy resources, technologies and issues to create awareness on all levels, and to address concerns of stakeholders.



## **Target setting**

Clarify goals, set ambitious targets at all levels of government and enact policies to achieve them.



## **Integrating**

Integrate renewables into policymaking and take advantage of synergies with energy efficiency.



## **Optimising**

Optimise policies by building on own policies or other proven policy mechanisms and adapting them to specific circumstances.







## **Neutralising**

Neutralise disadvantages in the marketplace, such as misconceptions of costs and the lack of a level playing field.

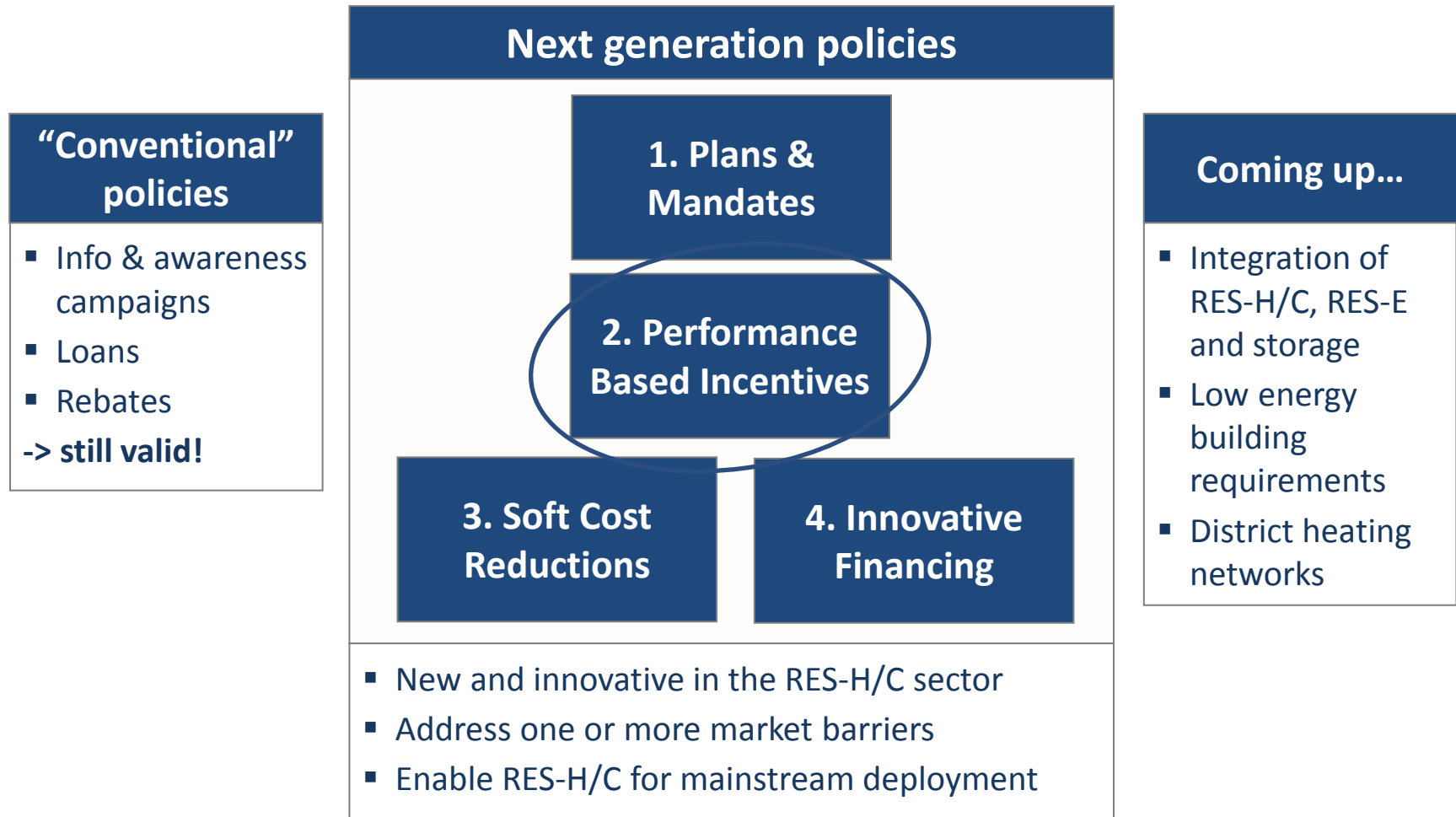
## Next-generation policy instruments for renewable energy

- **RES-E-NEXT:** renewable electricity
  - Policy instruments should incorporate **cost-**, **market-**, and **grid-**awareness
- **RES-T-NEXT** (ongoing): renewable transport
  - Policies for battery-electric, hydrogen and biofuels
- **RES-H/C-NEXT:** renewable heating and cooling (**commercial sector**)
  - Long-term planning, targets and mandates
  - Performance-based incentives
  - Soft-cost reductions
  - Innovative financing and business models

## To succeed, RES-H/C policy must address a number of persistent barriers

	<b>Lack of Demand and Awareness</b> <ul style="list-style-type: none"><li>• Lack of demand and awareness of RES-H/C</li><li>• Lack of confidence in system performance &amp; fuel availability</li></ul>
	<b>Financial Constraints</b> <ul style="list-style-type: none"><li>• Inadequate ROI</li><li>• Capital constraints</li></ul>
	<b>Misaligned Decision-making Processes</b> <ul style="list-style-type: none"><li>• Misaligned ownership priorities and decision-making barriers</li><li>• Low refurbishment rates</li><li>• Split incentives</li></ul>
	<b>Training and Operational Barriers</b> <ul style="list-style-type: none"><li>• Insufficient local contractor base</li><li>• Operations staff training requirements</li></ul>

## Policy areas that can drive the uptake of RES-H/C





### Designing and implementing performance-based incentives for RES-H/C

#### Description

- Generators are compensated (or incentivized) for the energy (or commodities) they produce

#### Important Points

- Approach to Setting the Payment Rate: admin. set, competitive bid, tradable credits, hybrids
- Payment duration
- Interconnection and Commodities transferred
- Useful Heat Requirements
- Heat Metering Standards: accuracy, maintenance, meaningful readings

#### Benefits

- Maximize quality of installation
- Maximize ratepayer value
- Support mature market development

#### Example

- UK: Renewable Heat Incentive
- Massachusetts: Alternative Portfolio Standard

## Actions need to be and can be taken now

- Governments can work on 6 categories of action that require little investments as such
- New and innovative policies are needed to rouse the RES market
- RES should be integrated into comprehensive, ambitious energy plans
- By creating a stable investment climate the overall costs of RE deployment can be minimised
- The low-carbon energy transition has to start today



The background of the slide is an underwater scene with sunlight filtering through the water, creating rays and a shimmering effect. A large, thick, circular graphic element is overlaid on the scene, starting from the top left and curving around the right side. The color of this circle transitions from a bright yellow-green at the top to a deep blue at the bottom.

# THANK YOU!

For additional information on IEA-RETD

Online: [www.iea-retd.org](http://www.iea-retd.org)

Contact: [info@iea-retd.org](mailto:info@iea-retd.org)

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