

Energy Day

Unlocking the synergies between EE, RE and Emission target

Karsten Neuhoff,
Dresden, 19.4.2013

- 1 The role of targets for policy implementation
- 2 Multiple targets to achieve one objective
- 3 Multiple objectives motivating one target
- 4 Translating targets into action
- 5 The role of EU ETS – a target turned instrument
- 6 Possible implications for formulation of energy and climate targets

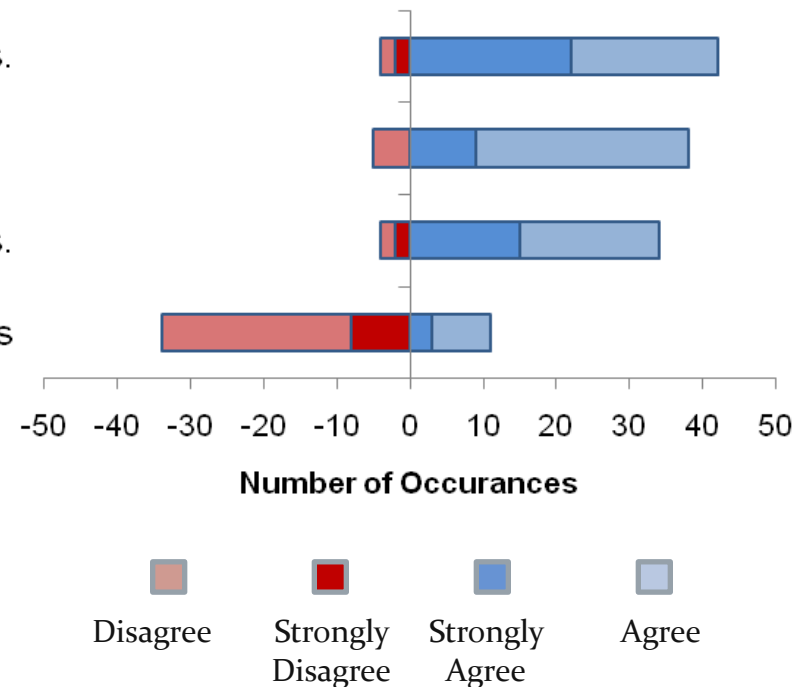
Ability of indicators to facilitate policy/project management

Indicators provided an early warning of problems or issues.

Indicators significantly improved implementation.

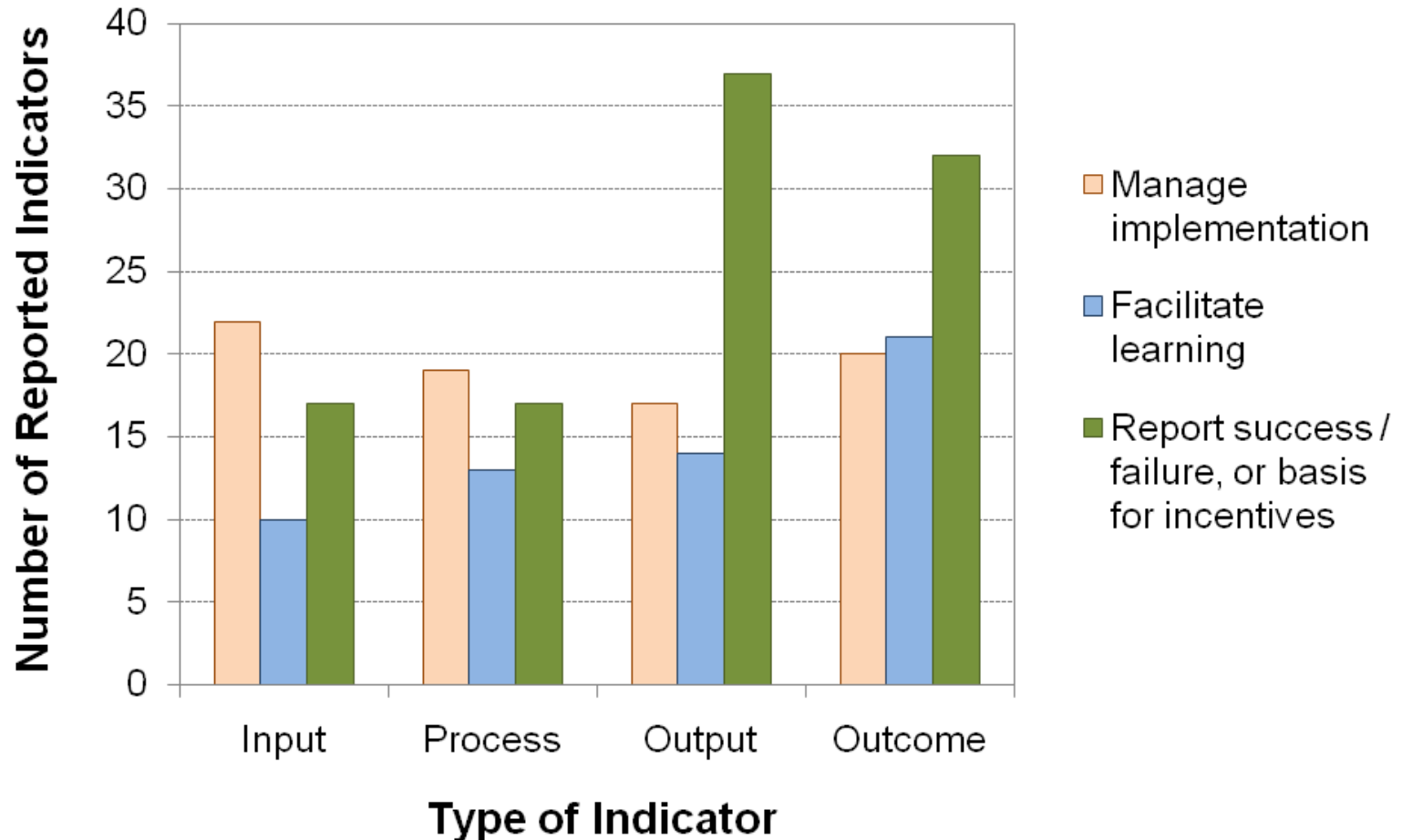
Indicators offered a fair measure of success.

The focus on indicators distracted from long-term goals



NOTE: 80% of respondents agreed that the data collection process for the indicators was labour intensive

What type of indicators are commonly used?



Lester, S. and K. Neuhoff, 2009, Understanding the roles of policy targets in national and international governance. *Climate Policy*, 9 (5), p. 464-480.

Policy target applied to

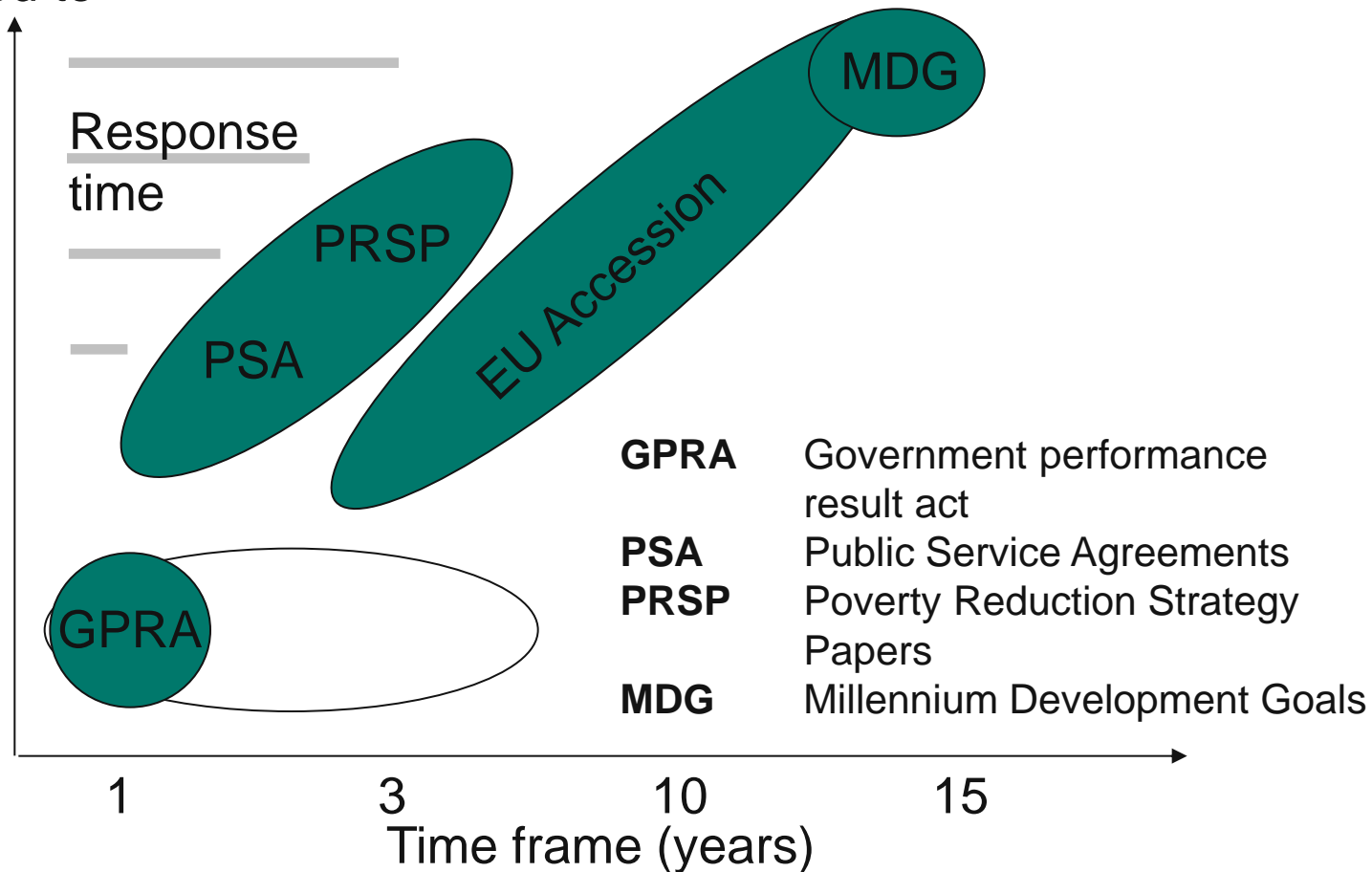
Outcome

- Allow comparison of policy effectiveness
- Often more difficult to define

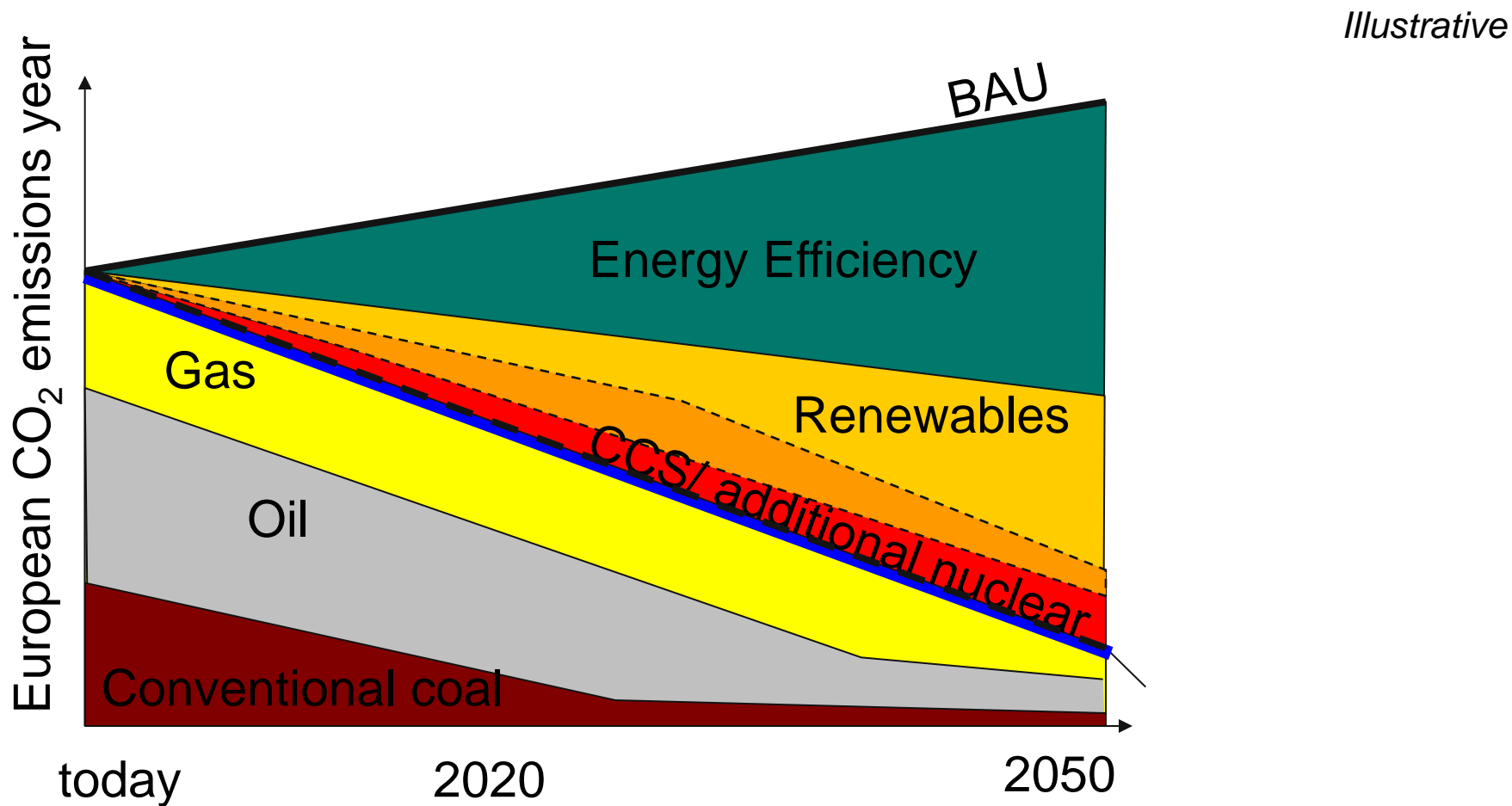
- Response time
- Identify barriers

Input

- Easier to measure
- Can ignore important interactions / focus to narrowly



Lester, S. and K. Neuhoﬀ, 2009, Understanding the roles of policy targets in national and international governance. *Climate Policy*, 9 (5), p. 464-480.

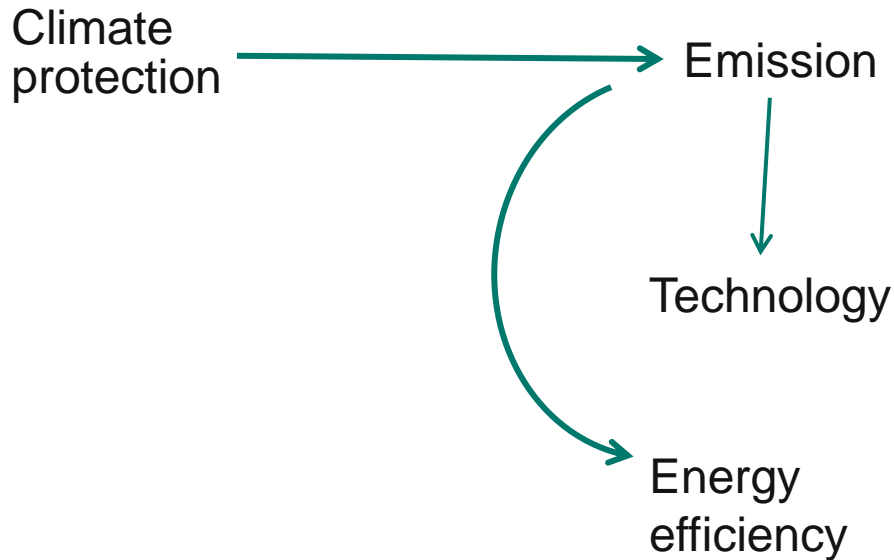


Illustration

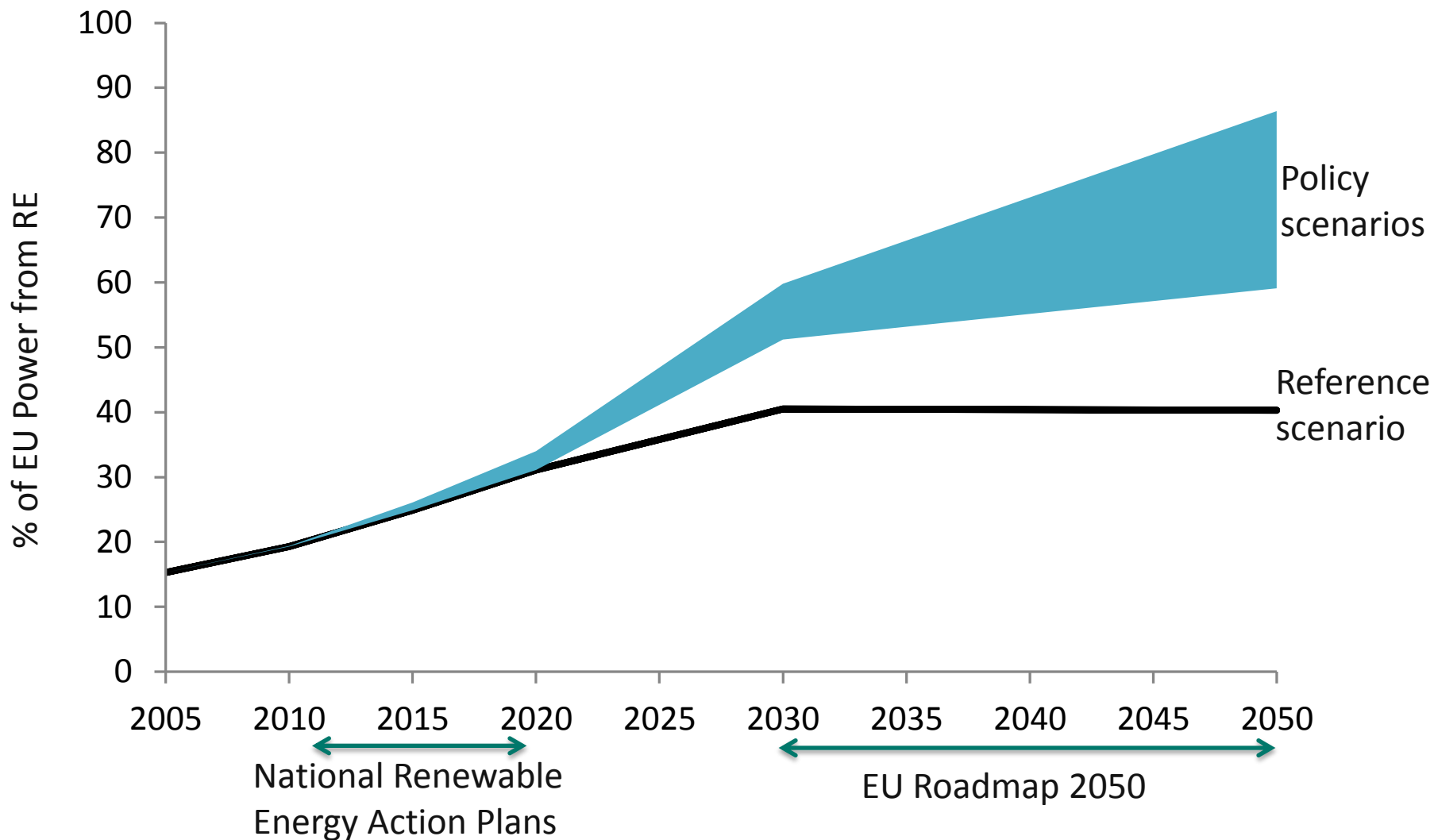
Political objective

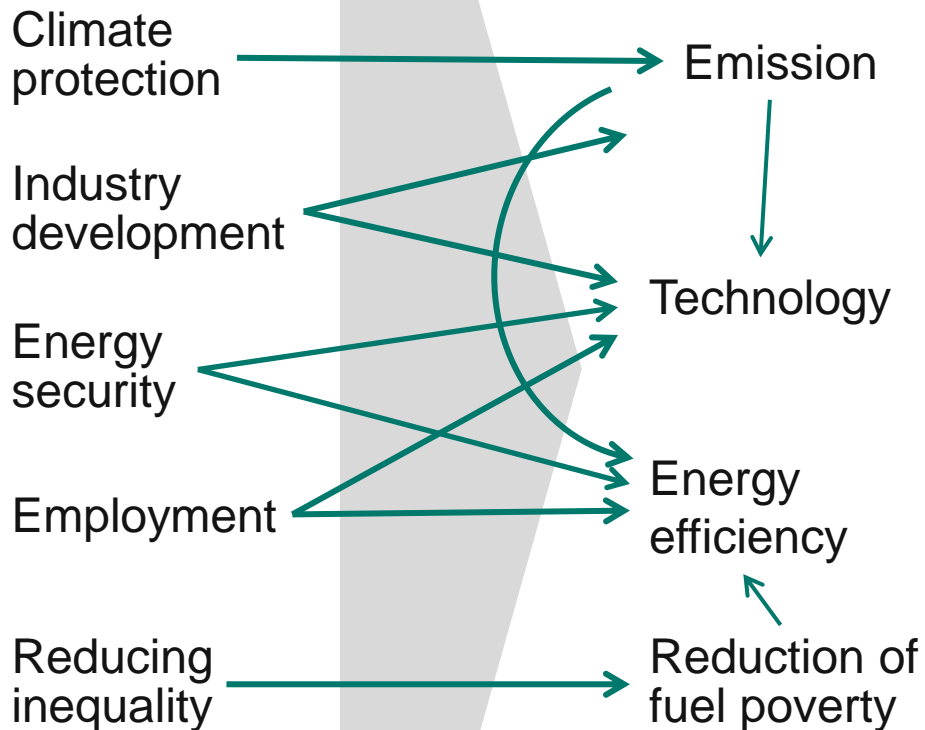
Targets

Policies / Programms



Example RE deployment



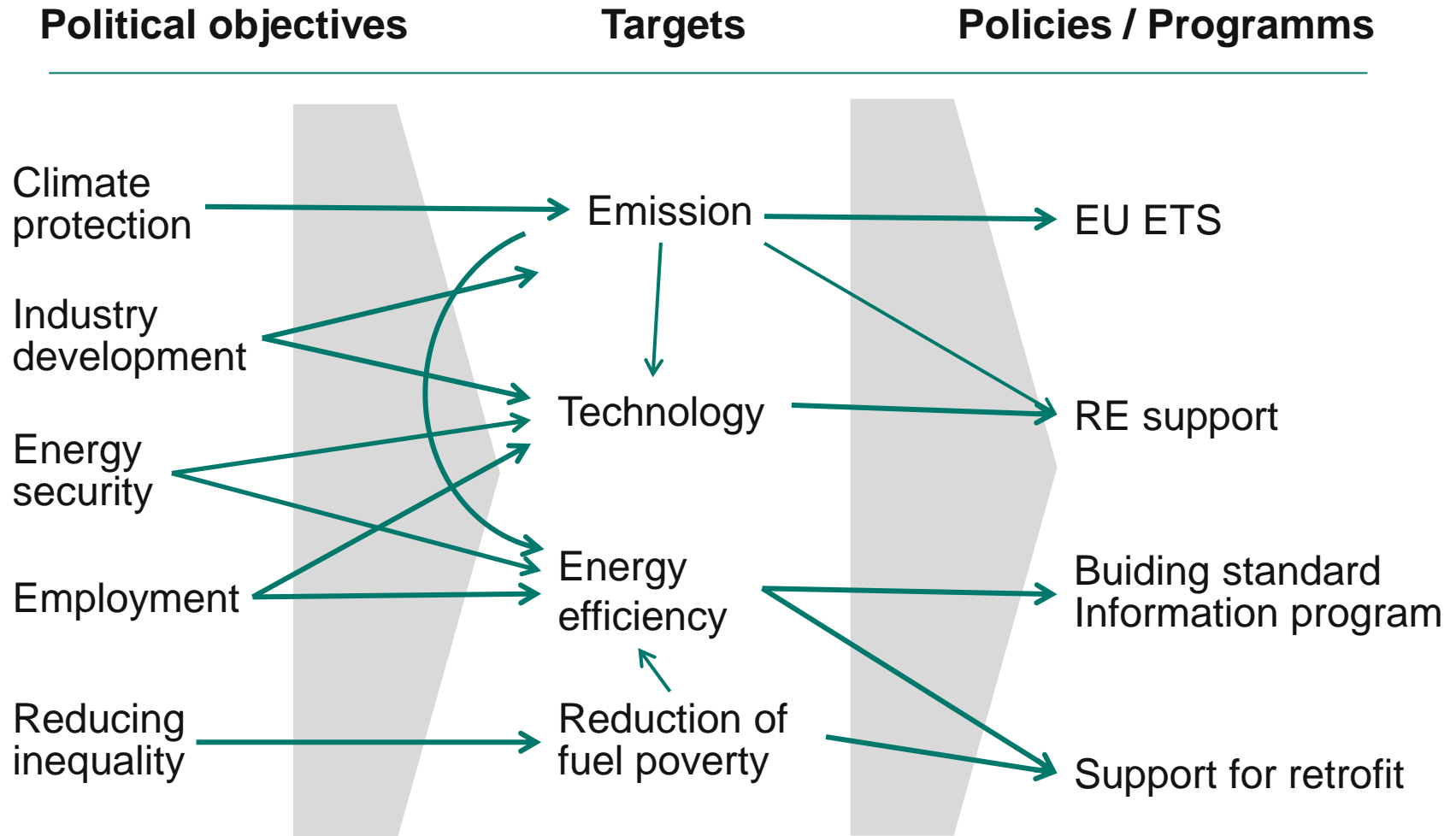
*Illustration***Political objectives****Targets****Policies / Programms**

3 Short-term job multiplier effects of green investments

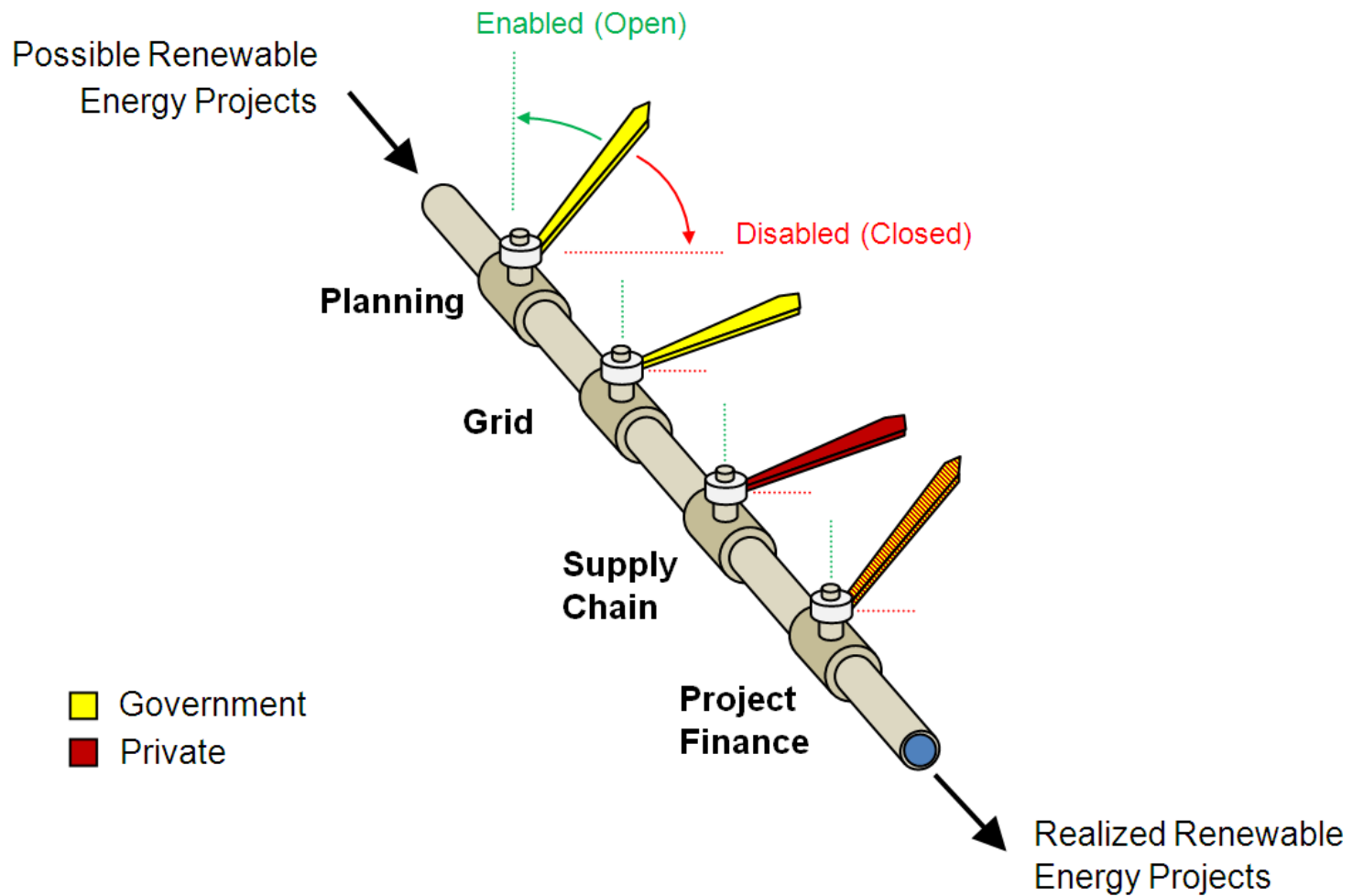
Direct and indirect full time employment creation in low versus high carbon sectors (source: data for France, 2009, source INSEE and ADEME)

| | Direct + indirect employment content per million € of expenditure |
|--------------------------|---|
| Energy efficiency | 17 |
| RES (wind/PV) | 10-14 |
| Transport infrastructure | 16 |
| Oil | 2.4 |
| Gas | 3.6 |

Spencer T. , K. Bernoth, L. Chancel, E. Guerin, K. Neuhoff (2012) Green investments in a European Growth Package, IDDRI Working Paper 11

Illustration

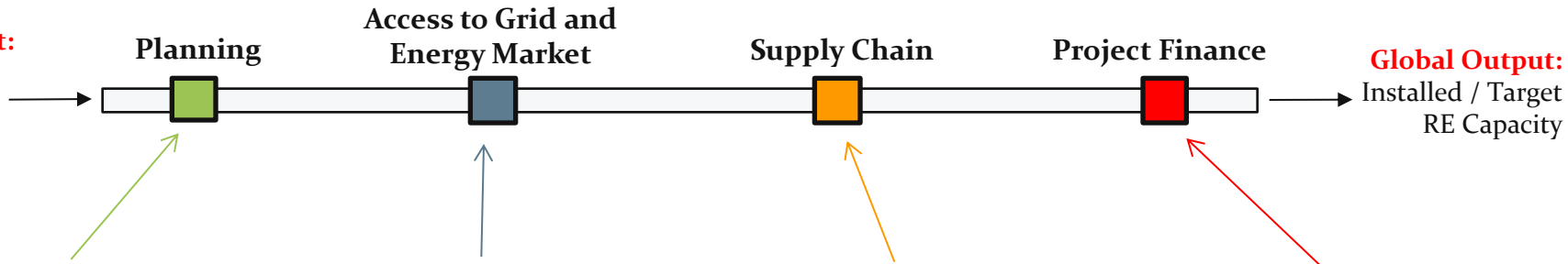
What is necessary to deliver targets – example RE



Barriers along the RE pipeline

Global Input:

Technically-Feasible RE Generation Capacity



Barriers

Lack of effective legal / regulatory framework

Lack of private participation and professional institutions

Uncertainty with government policies

Lack of coordination between authorities

Lack of consumer/social acceptance of RE technologies

Barriers

Highly controlled energy sector

Lack of grid access for RE technologies

Lack of clear practises and procedures (related to planning barriers)

Lack of available grid capacity

High grid connection costs for RE developers (poor cost allocation)

Lack of access to energy market

Barriers

Lack of competition and lack of standards and codes of certification

Lack of entrepreneurs, skilled labour, and training and O&M facilities

Lack of R&D capacity

Restricted access to technologies

Lack of reliability of products

Lack of institutions / mechanisms to disseminate information

Barriers

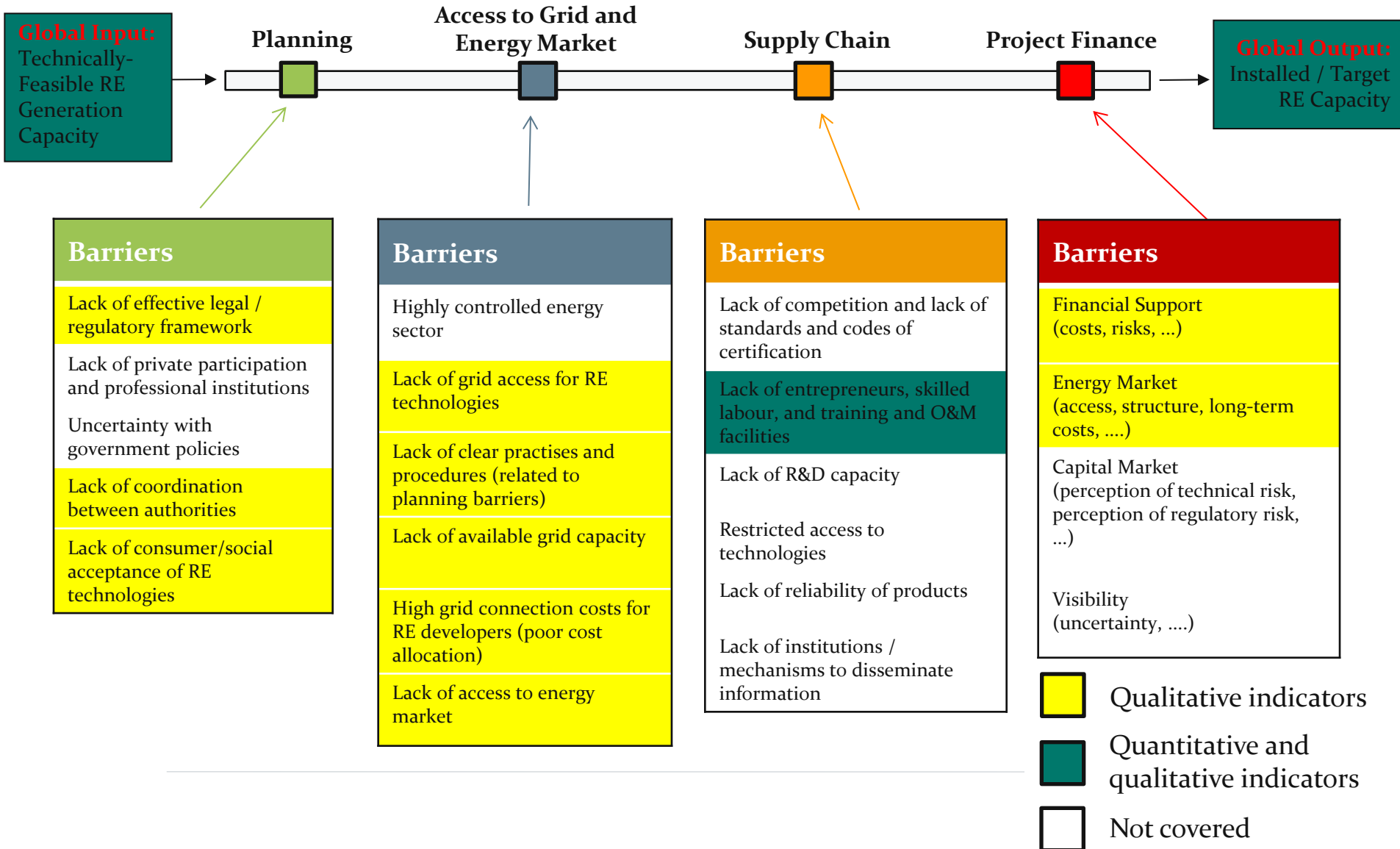
Financial Support (costs, risks, ...)

Energy Market (access, structure, long-term costs, ...)

Capital Market (perception of technical risk, perception of regulatory risk, ...)

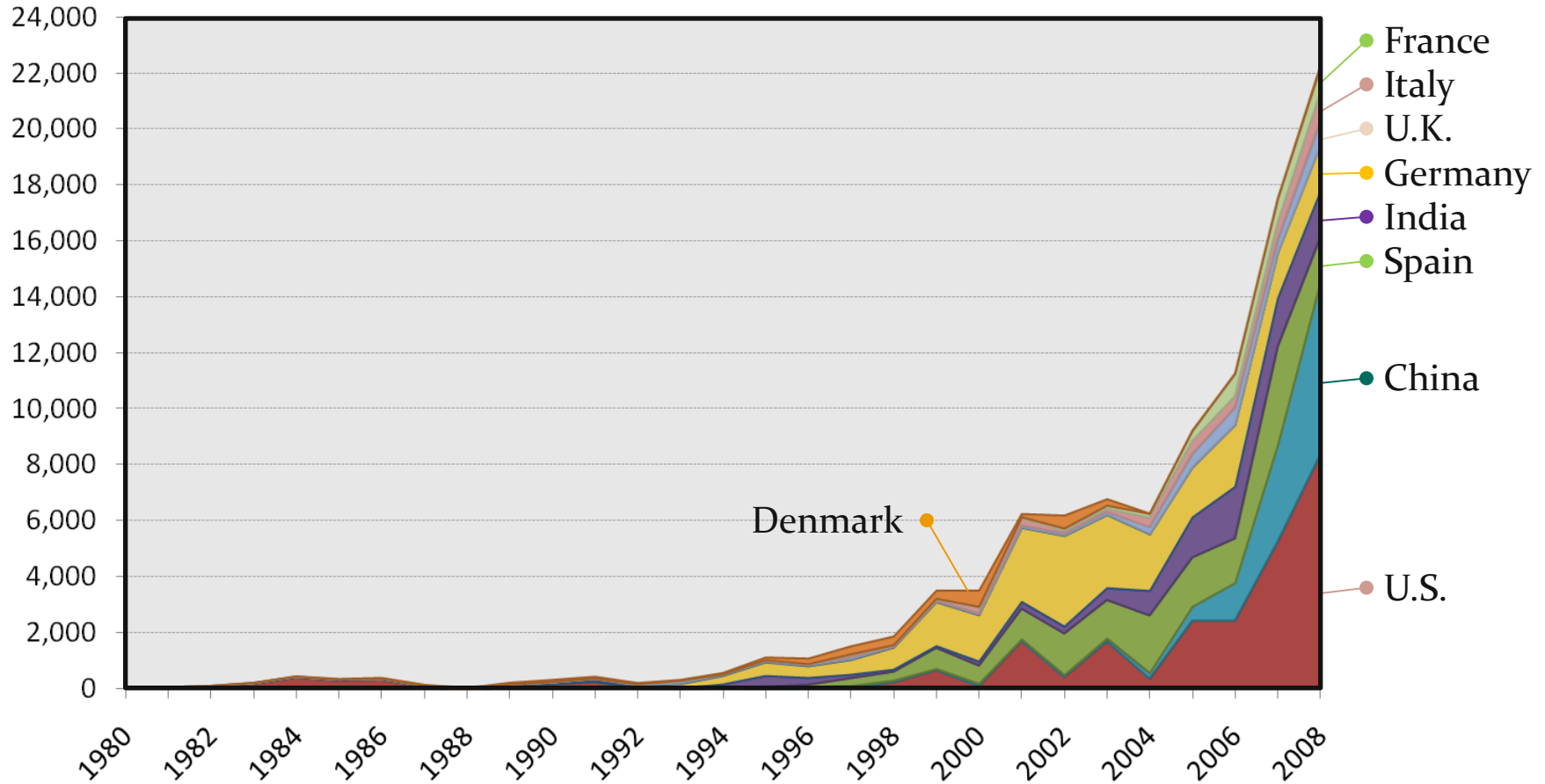
Visibility (uncertainty,)

Barriers along the RE pipeline: Indicators provided in NREAPs:

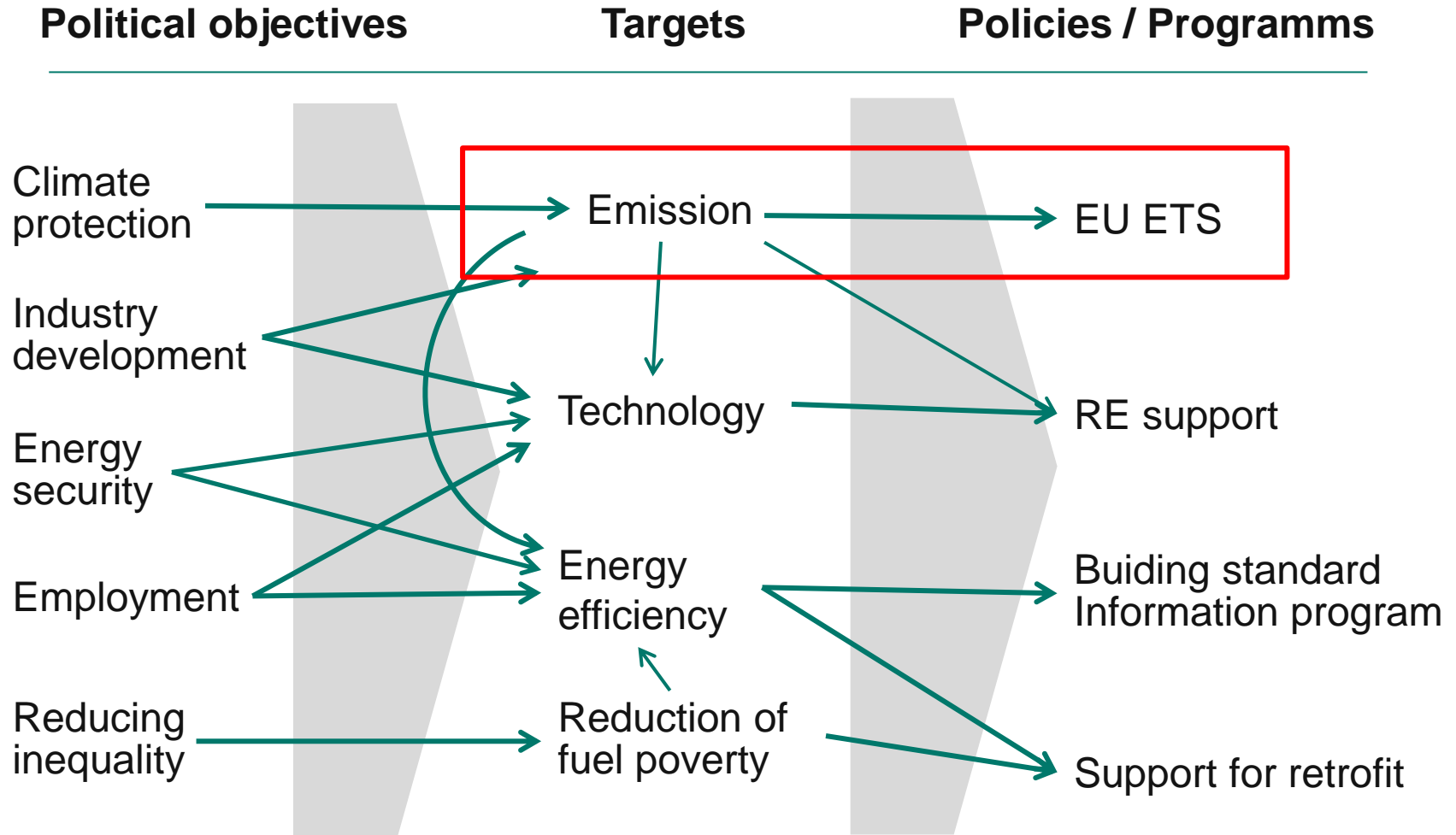


2nd Purpose of targets: Creating confidence for investors in supply chain

Installed wind power per year (MW)



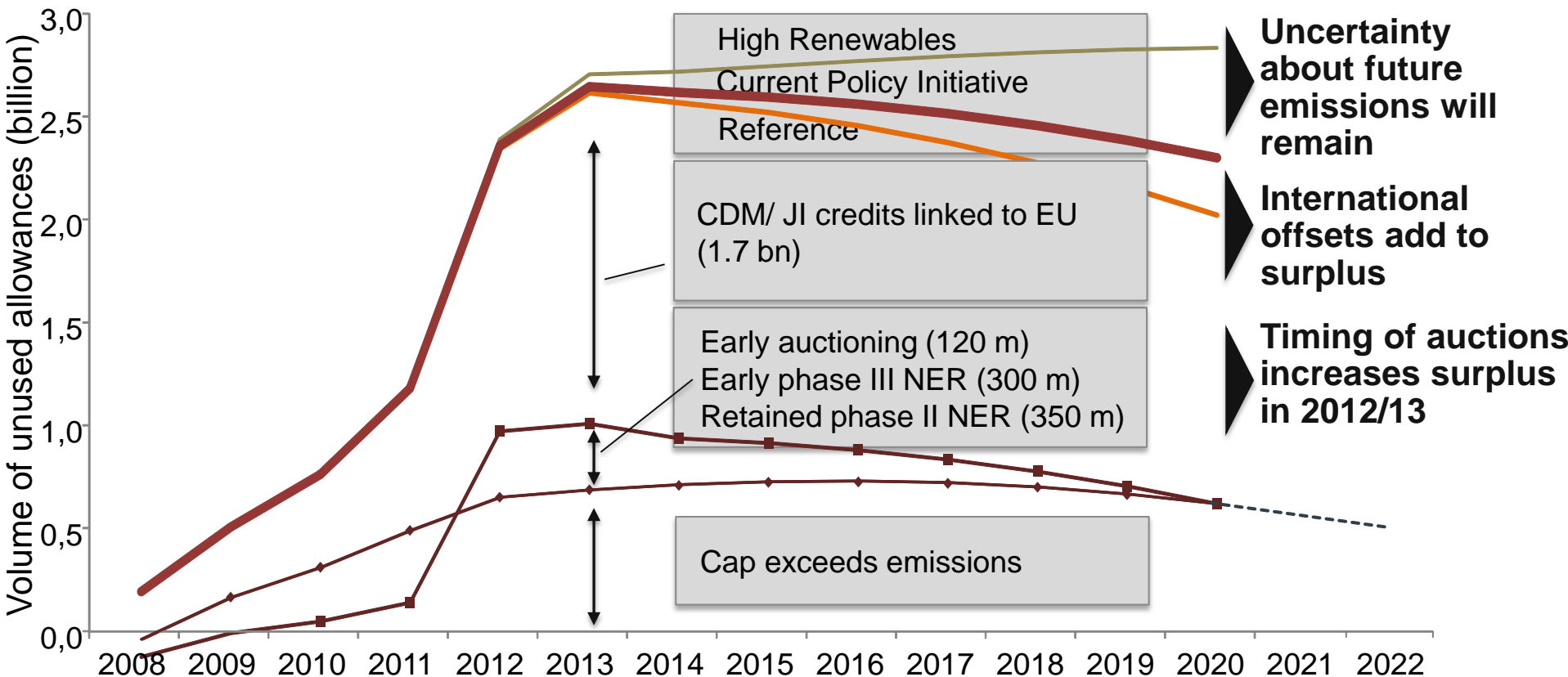
Source: IEA, GWEC, Worldwatch Institute

Illustration

- I. Capturing Companies' Attention
- II. Providing Clarity for Decision Making
- III. Creating enabling environment for Low-Carbon Investment

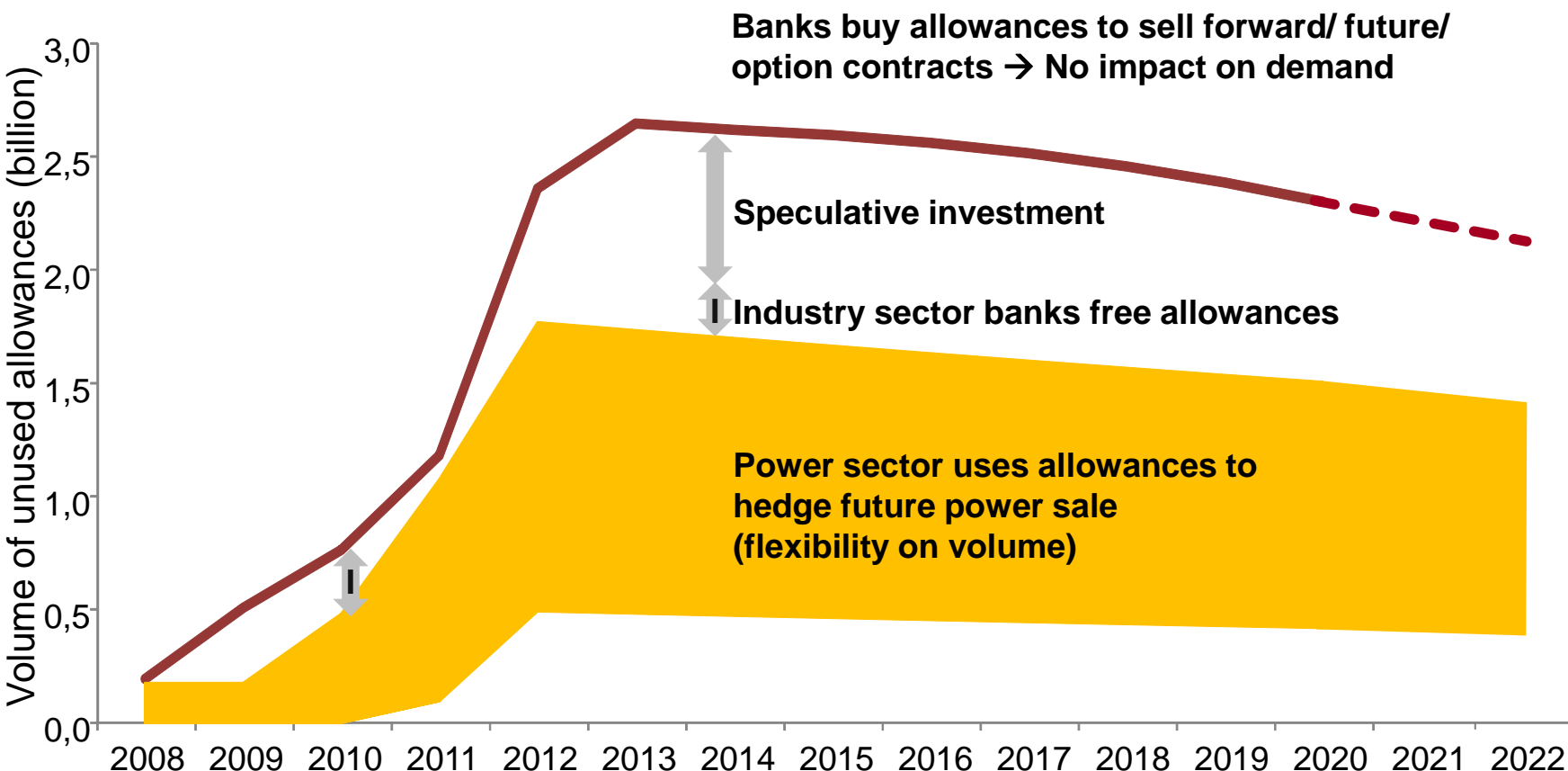
See Climate Strategies Project Summary: Carbon pricing for low carbon investment

The surplus of unused allowances is „piling“ up



Source: *Banking of Surplus Emissions Allowances: Does the Volume Matter?* DIW Discussion paper 1196

Where do unused allowances go?



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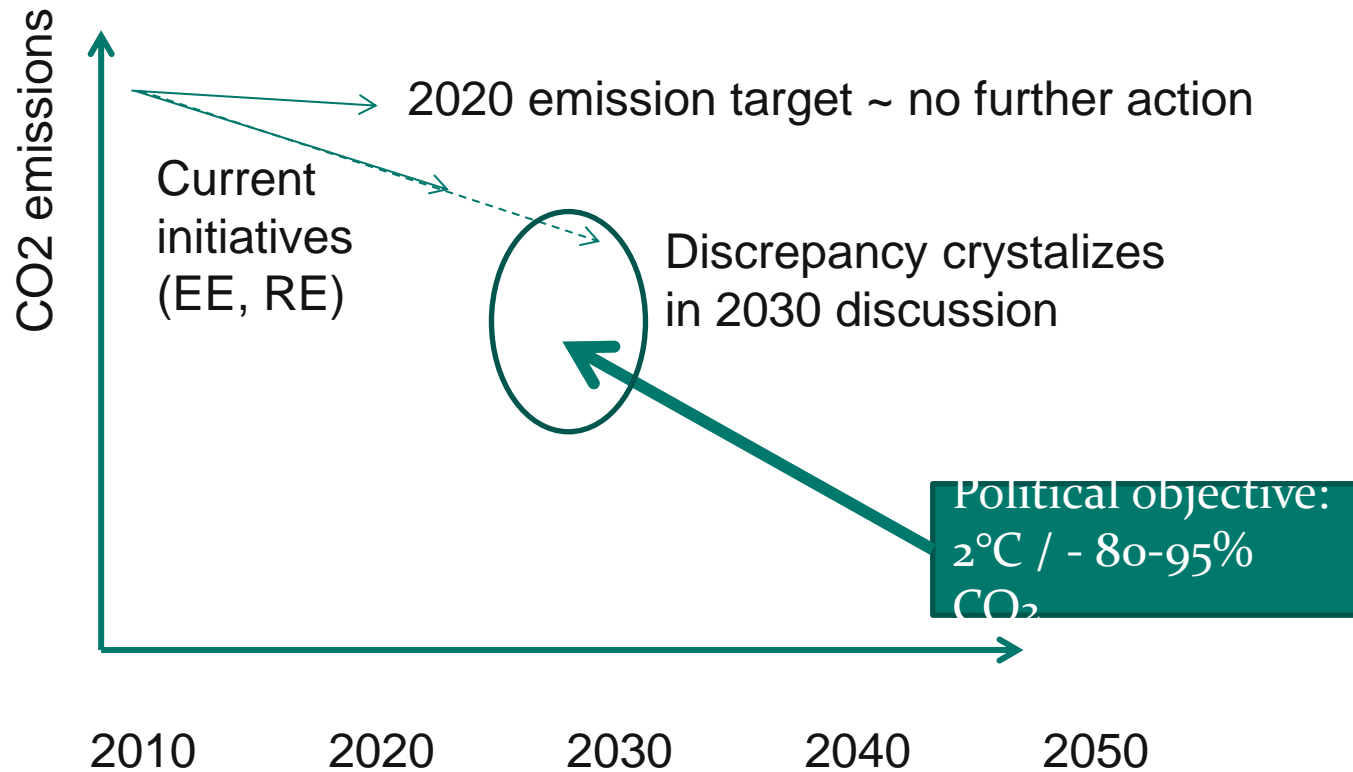
- Consistency of targets:
 - Could limit scope for political compromise
 - Might be difficult to test with real data/projections
 - Could limit link from specific political objective to target
- > Coherence is guiding principle

How to model this?

Jose Ramon San Cristobal (2012) A goal programming model for environmental policy analysis, Energy Policy

6 Discrepancy can trigger discussion to increase consistency

Illustration



- Capacity of political process is limited
 - > allow for renegotiation of a sub-set of targets at a time
- For some targets long-term matters
 - > but if all targets set long-term = inflexible
 - > allow for different time frames for different targets
- Avoid artificial simplification of target frameworks
 - > build on historic development of objectives and targets

Continue & further develop current set of targets.

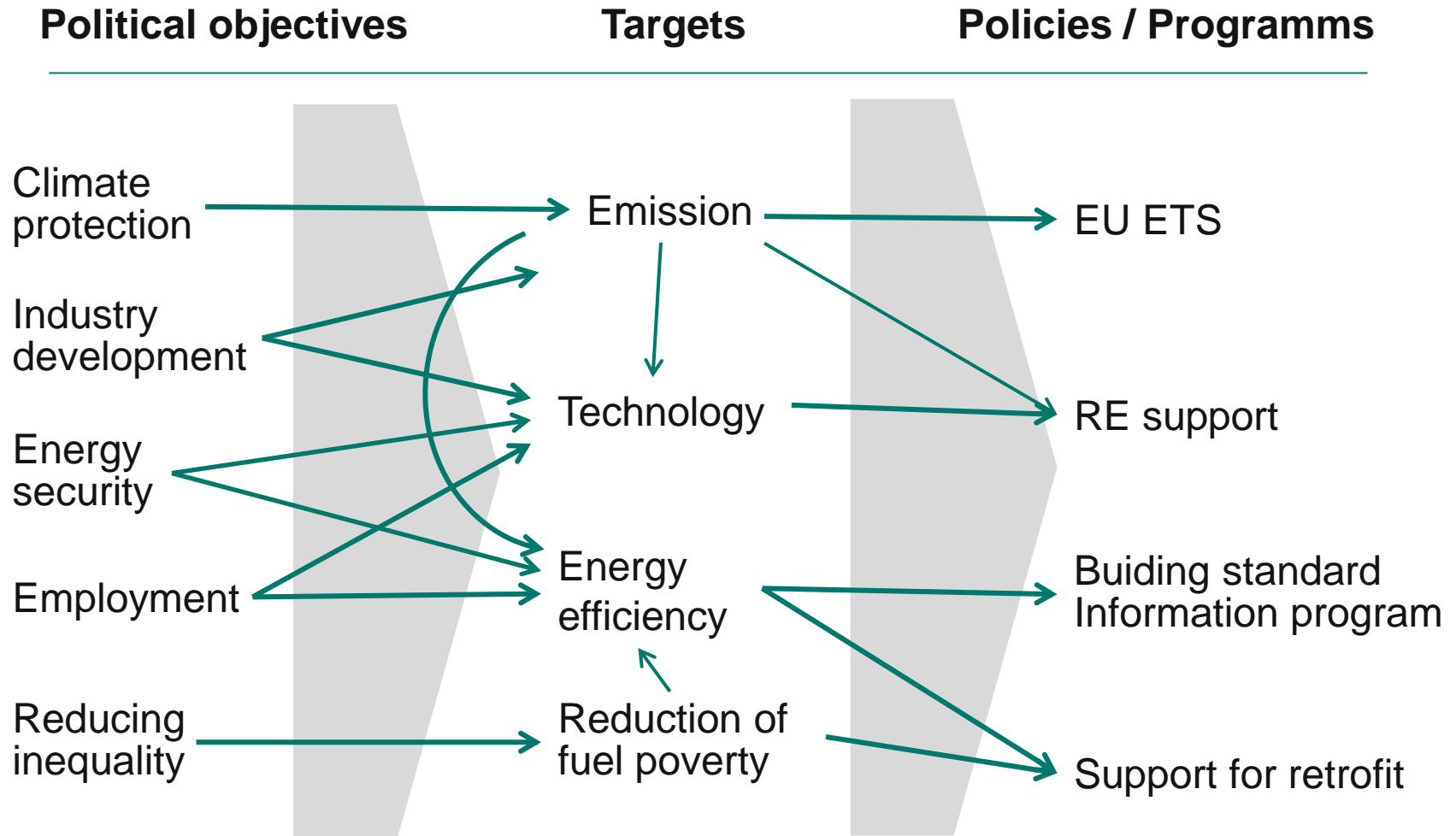
See: H. Meyar-Naimi, S. Vaez-Zadeh (2012) Sustainable development based energy policy making frameworks, a critical review, Energy Policy

- Enhance predictability of future adjustment of targets
 - > formulate minimum levels of attributes nec. for society
 - > link targets more closely to policy objectives
- Enhance credibility of targets
 - > balance „ambition“ with credibility/effectiveness
 - > develop track record of delivery against targets
 - > show commitment with complementing short-term pol.

Integrate multiple actors more closely in 2030 process.

Track and support delivery against targets.

Create transparency around process of target adjustment.

Illustration

Vielen Dank für Ihre Aufmerksamkeit.



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