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Strategic Energy Technology Plan's ("SET Plan's") *European Industrial Initiatives*

How could they benefit renewables?

*European Sustainable Energy Policy Seminar
INFORSE-Europe & EREF
April 8, 2008, Brussels*

http://www.inforse.org/europe/seminar08_BXL.htm

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Arrowsmith**

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European Industrial Initiatives – a concept yet to be defined

COM(2007) 723

22-Nov-2007

6326/1/08

28-Feb-2008

Draft report EP

17-Mar-2008

“mobilising critical mass of activities and actors”

“focus and align the efforts of the Community, Member States and industry”

“voluntary nature”

“demonstrate cost-effectiveness and added value”

“can take the form of public private partnerships or of joint programming”

supports need to tailor each EII to the needs of the specific sector it is concerned with

Eligible renewable energy technologies

Focus on large
turbines, systems
validation

Wind

Large scale
demonstration of
PV, CSP

Solar

Next generation
biofuels

Bio-energy

Implement R&D
programme for
TSOs

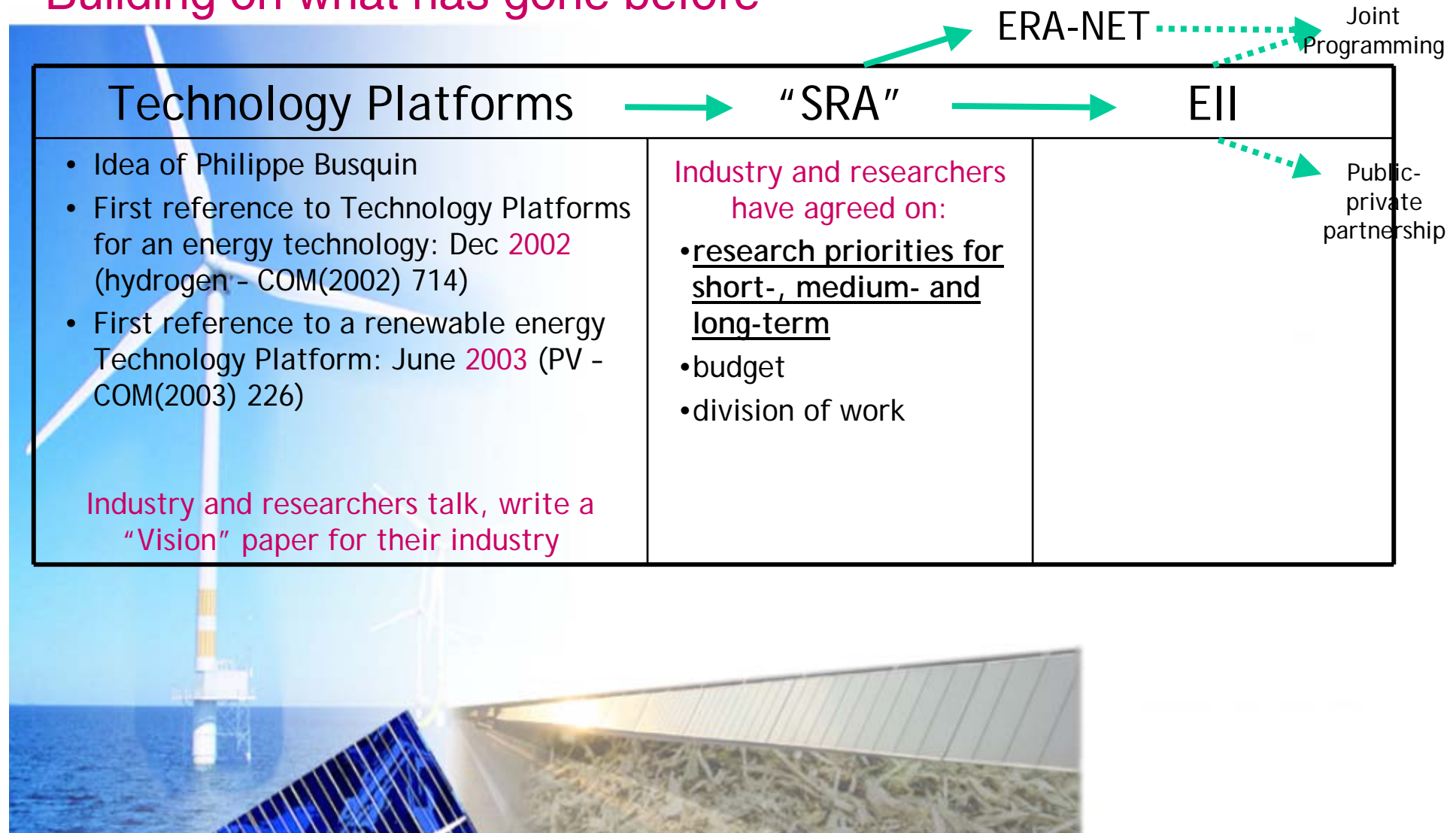
Grids

? **Marine**
? **Storage**
? **Efficiency**

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Building on what has gone before



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Reading between the lines in the SET Plan

- ➔ Spur investment by private sector and MS in energy technology



Aside: Power sector investment in R&D

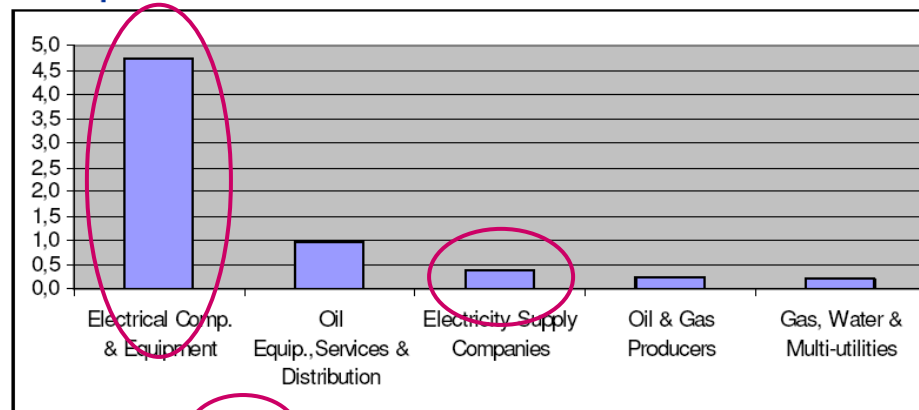
COM(2006) 697 (14-Nov-2006):

"[...] following liberalisation, a shift [has occurred] in the composition of R&D efforts: the innovation focus of the companies moves away from (public-interest) technology innovation towards cost-reducing technologies and consumer services. While **aggregate R&D spending appears to have diminished**, the focus on efficiency improving innovation seems to have increased."

CONCLUSIONS-3



- Manufacturers RTD expenditures have been high (7,8 billion EUR/a) and constant in time
- The R&D Intensity of the sector electrical components & equipment is high (4,7%) compared with other sectors



Brussels, February 20th 2008

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Reading between the lines in the SET Plan

- ➔ Ells should spur investment by private sector and MS in energy technology
- ➔ ... and achieve greater participation of industry in FP projects

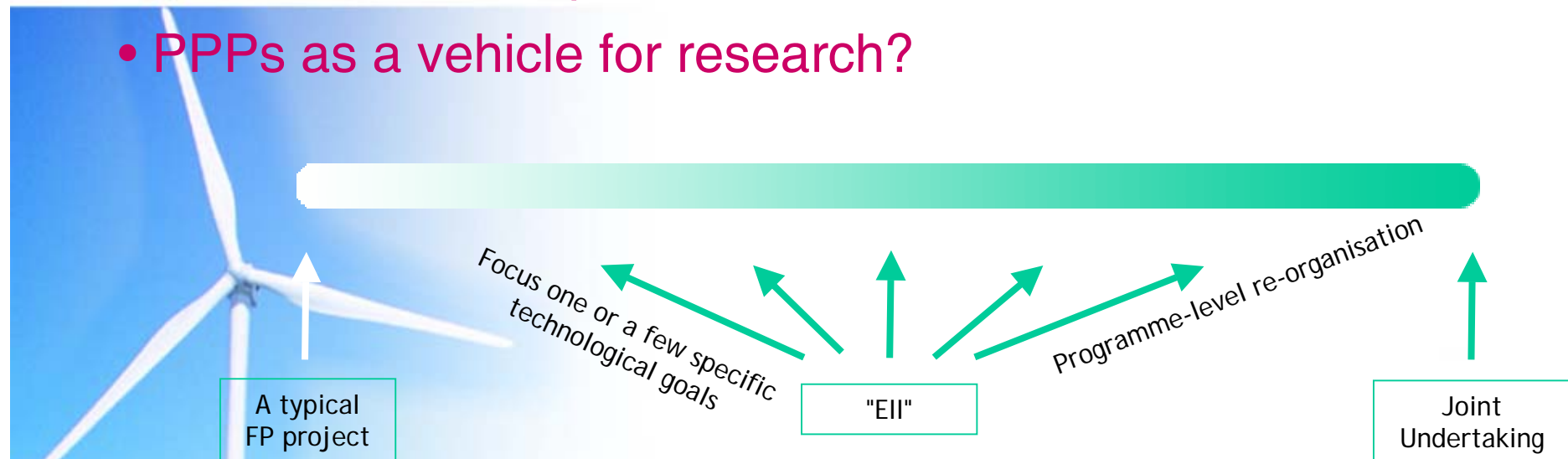


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How PPPs fit into the picture

- PPPs as a vehicle for research?



- ...or better suited as vehicle for demonstration?

COM(2004) 38 (28-Jan-2004):

"[Technology Platforms will] examine possibilities for public-private partnerships to promote commercialisation;"

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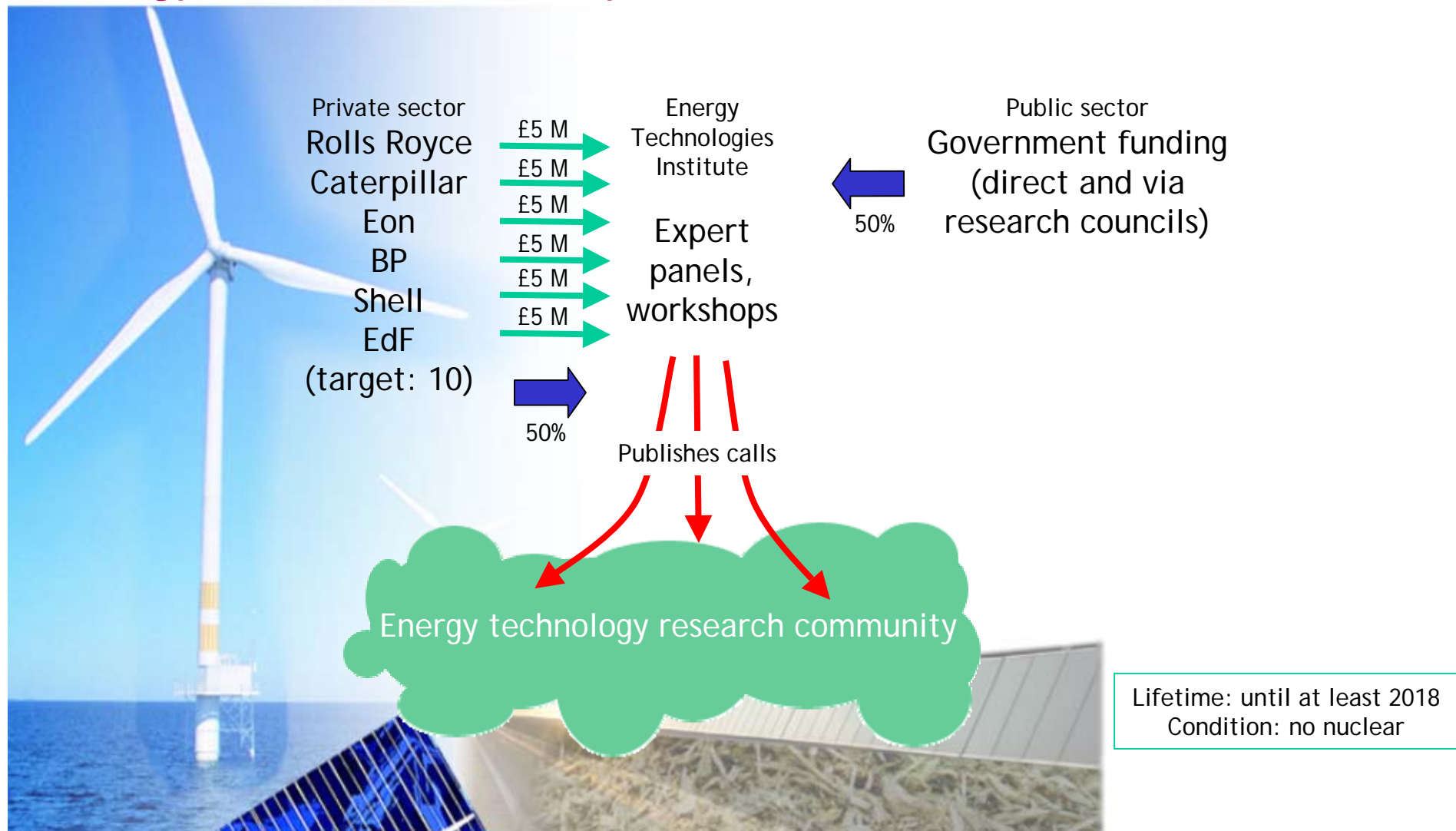
More on "Joint Undertakings" (EU-style)



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Energy R&D PPPs, UK-style



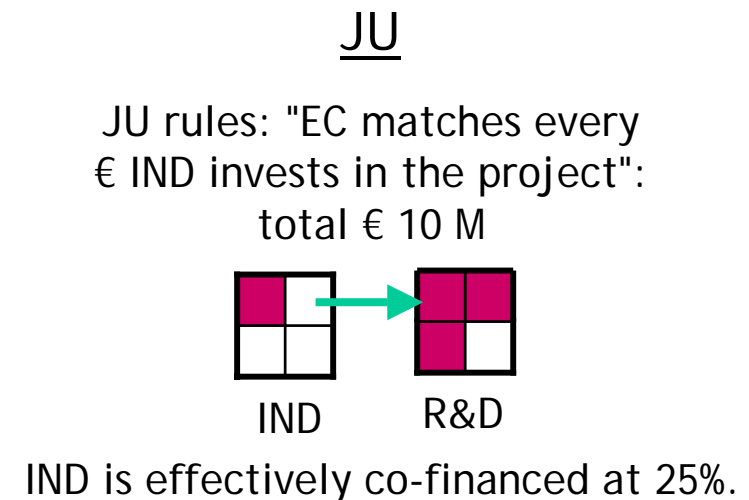
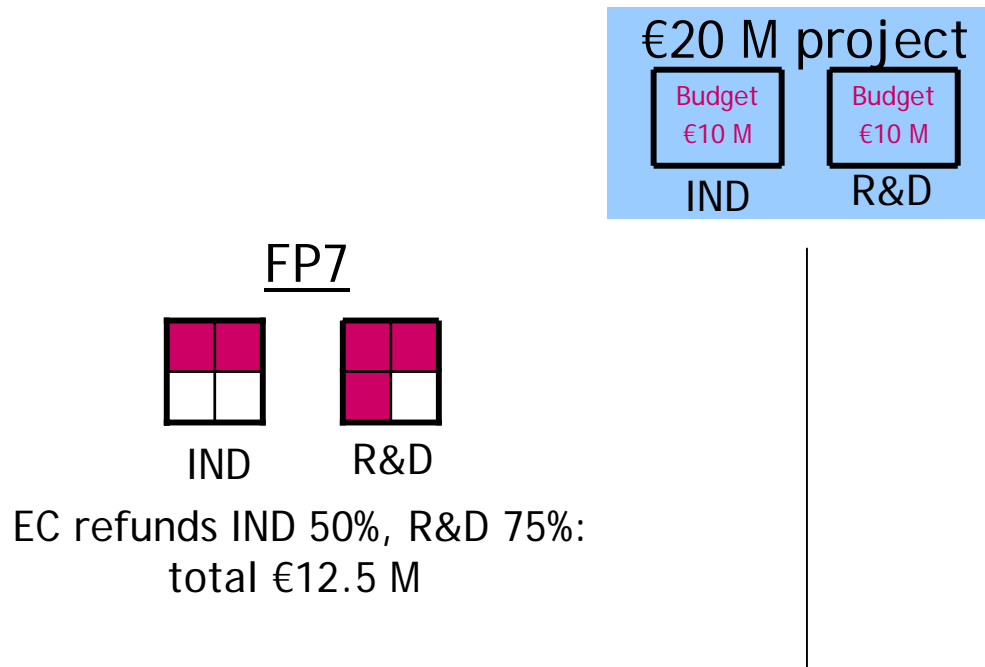
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Research centres' interests subordinate to industry's in a JU

- 
- ➔ R&D centres have little capacity to co-finance projects and the JU 'programme office' (result: 1 vote out of 12 on the Governing Board)
 - ➔ JU's funding arrangements put industry in driving seat (participation of research centres in projects is expensive)
 - ➔ Tight grip on IPR by industry:
 - confidentiality
 - exclusivity
 - access to background/sideground
 - ➔ R&D centres' role here is as a service provider
 - ➔ But R&D centres also like to
 - profit themselves from knowledge they create
 - publish
 - work with whomsoever they want
 - ➔ This freedom gives them the academic quality that makes them interesting for industry

Aside: comparison of funding of R&D project partners in FP7 and JU



JU creates a new incentive for IND:



Minimising R&D's role increases IND's funding rate. If IND considers its work to be the core of the project, this feature of the funding scheme gives IND a greater incentive to argue for a larger share of the total budget than FP7's funding scheme, because FP7 would refund IND at 50% regardless of the scale of its tasks.

or

IND R&D


A bigger project with greater industry participation boosts IND's effective co-financing rate.

Industry dominance of projects

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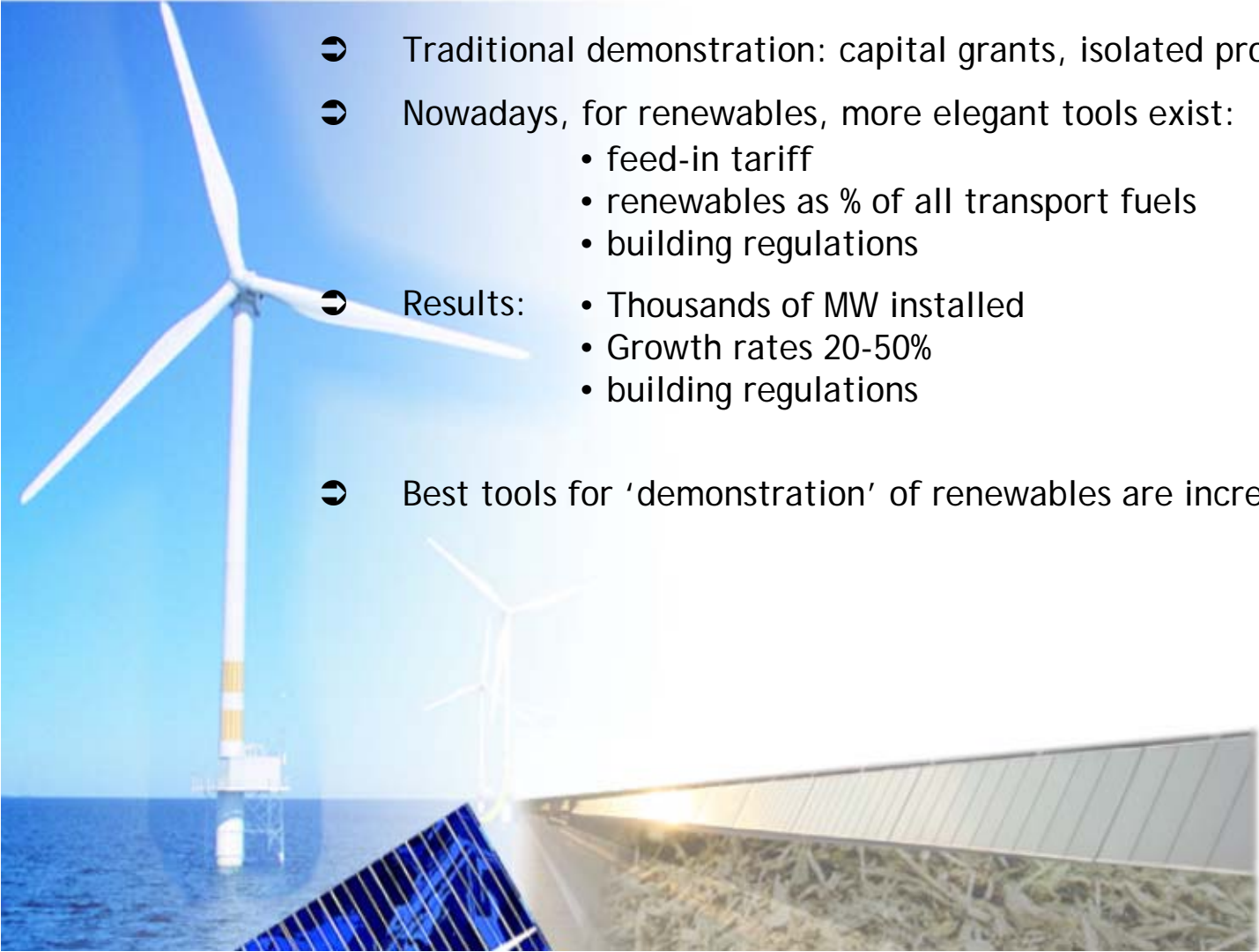
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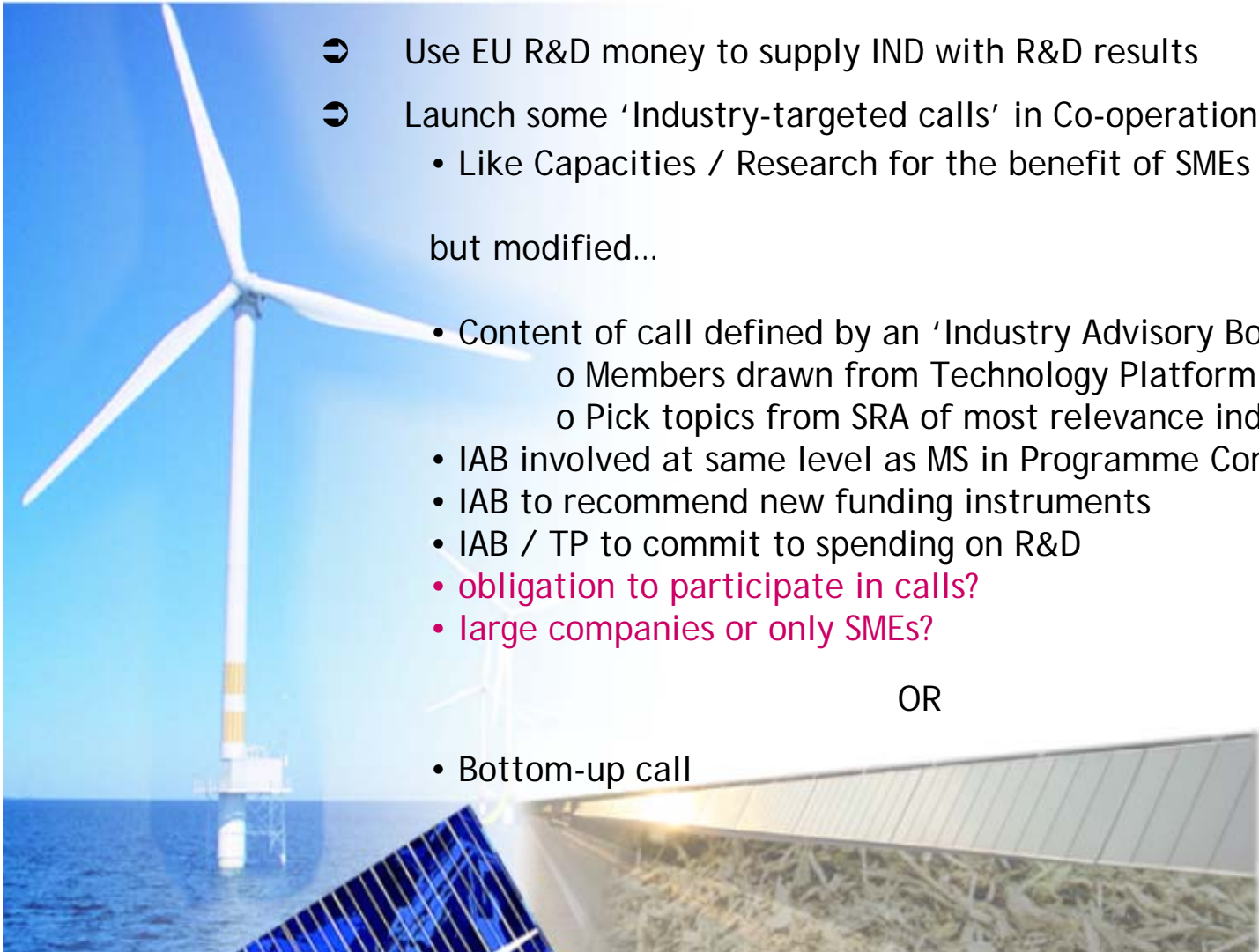
How important is 'Demonstration' in Co-operation / Energy projects?

- 
- ➔ Traditional demonstration: capital grants, isolated projects
 - ➔ Nowadays, for renewables, more elegant tools exist:
 - feed-in tariff
 - renewables as % of all transport fuels
 - building regulations
 - ➔ Results:
 - Thousands of MW installed
 - Growth rates 20-50%
 - building regulations
 - ➔ Best tools for 'demonstration' of renewables are increasingly regulatory

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If not with 'Demonstration', how else to involve RES industry in EU R&D?

- 
- ➔ Use EU R&D money to supply IND with R&D results
 - ➔ Launch some 'Industry-targeted calls' in Co-operation / Energy
 - Like Capacities / Research for the benefit of SMEs

but modified...

- Content of call defined by an 'Industry Advisory Board'
 - Members drawn from Technology Platform
 - Pick topics from SRA of most relevance industry
- IAB involved at same level as MS in Programme Committee
- IAB to recommend new funding instruments
- IAB / TP to commit to spending on R&D
- obligation to participate in calls?
- large companies or only SMEs?


OR

- Bottom-up call

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Advantages of working in this way

- 
- ➔ Advantages of a JU without the disadvantages
 - Industry in the driving seat for a part of renewables research
 - Greater participation of industry in research
 - Lighter structure
 - Benign FP7 funding regimes apply
 - Clarity for R&D centres in the roles that they are meant to fulfil

Standard Co-operation / Energy calls

- Participate on equal footing with other project partners
- Independence

Maintain existing system

'Industry-targeted calls'

- Service provider
- Strict IPR constraints

Add this new system

COM(2006) 697 (14-Nov-2006):

"[...] additional policy measures may be necessary to encourage fundamental energy research to recover its pre-liberalisation situation."



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Conclusion and disclaimer

- ➔ Ells follow on from TPs, are next stage of integration of private & public, EU & MS research policy
- ➔ Ells could re-organise the funding of renewable energy research
- ➔ Re-assess role of 'demonstration' of renewables in research policy
- ➔ Involve industry more in EU research programmes, while maintaining independence of research centres
- ➔ These are initial ideas. Expect revision and refinement over coming months.

