Workshop Summary and Outcomes

EGRD - 10 November – 2010

Session Leader

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Workshops Outcome

- Wrap up slides 3-7: Birte Holst Jørgensen

Defining evaluation

- **Evaluation** is systematic determination of merit, worth, and significance of something or someone using criteria against a set of standards

- **Evaluation** is the systematic acquisition and assessment of information to provide useful feedback about some object
  - data collection
  - judgement about the validity of data and of the inferences we make about it
  - useful feedback to various audiences

Motivation

- **Acceleration**
  - Technology development needed to address the three Es, more than ever!

- **Accountability**
  - Who can call for an account and who owes a duty of an explanation:
    - Political
    - Administrative
    - Professional

Ex-ante (Swedish case; IEA acceleration project)

– Transformation of the energy system and the strategic role of ER bringing down Cost of Energy for new technologies

– *Trade off* between

- Risk taking vs demonstrating success in RD&D, especially having the uncertainty in RD&D in mind
- Intended and unintended behavioural consequences (Ph.D's, innovations etc.)
- National focus vs. opportunities for international cooperation
- RD&D (push) vs. other market support mechanisms (pull), also in terms of expenditure.

– Strategic holistic approach needed to transform energy systems

– Diverse roles, perspectives and stakeholders when building consensus on new priorities and design programmes

– Input and *inspiration from other sectors* (health, agriculture etc.)

– RD&D is long term, relevant for energy systems and global markets; it may have huge impact, but it takes time and requires patience.

Espert Group on
R & D Priority Setting
And Evaluation

iea
Energy Technology
Network

In progress: keeping pace in the race (EU and US cases)

- *Development and implementation of monitoring systems and tools*
  - Step-wise roll-out (pilot, learning or cautious process?)
  - Tailor made data and tools - transparency
  - Methodological challenges when measuring impact of public strategic plans on overall policy goals, impact on policies, R&D investments, action progress/performance
  - Requirements for both qualitative and quantitative data and analysis
  - Standardising performance measurements, data collection and use of performance information (feedback)
  - The powerful tool of *scoreboards* for decision-makers whereas practitioners more interested in using performance information
  - Information sharing is about stable monitoring architecture
  - Systematic linkages in the process from mission to performance
- Technology development and tracking that *progress not restricted to one country (or company)* – good case for international cooperation!

Ex-post: Back to the future (Nordic scoreboard, US case and international case)

- The methodological **_challenges in developing cross-country indicators_** covering the value chain in its context

- Need for improvements on individual indicators as well as composed indicators, incl. better data on industrial activities, investments, tech transfer, policy framework conditions etc.

- Retrospective and prospective evaluations
  - R&D takes time and requires long term impact assessment
  - Defining and measuring benefits and costs (3 Es) analytically demanding
  - Adapting retrospective methodologies to prospective construct
  - Always uncertainties to take into consideration – complex technologies, dynamic markets, changing society

- Systemic evaluations and impact assessment frameworks
  - narrative, indicator, self evaluation and context sensitive approaches

The role of evaluation in priority setting and policy making: Technopolis

- Need for more effective and ambitious energy R&D policy & Need for better information

- How to come from evaluation to priority setting.

  – Evaluation is an essential component, but in combination with road mapping, needs assessments, market survey etc.

  – Levels of priority setting: strategy, programme creation, programme design

  – Have the courage to give unpopular messages (fuel cells): cut budget or redirect programmes. (freight) but it's a **policy decision** by the end of the day (and competes with other priorities).

  – How to faze out technologies.

Priority setting and policy making 2

- Ensure objectives can be met (define market barriers and deal with them)
- Evaluation often within programme, and not between programmes
- Evaluation results go through layers of governance
- Effective use of conclusions: right moment, involve stakeholders (from the start), high level evaluation committee. Formal reviewing of follow-up evaluation, action plan based.
- Social research evaluation: possible, but more complex

FP 7 evaluation

- Ex ante FP8, In process FP7, Ex Post FP5 (compulsory)

- Broad evaluation: Internal, Experts, Interest groups, Committees, General Public.

- Scope: General, specific impact, Instruments (networks of excellence etc.), Processes (time to contract)

- Interim evaluation: Report drafted by external experts with open stakeholder evaluation

- Interim evaluation FP7 is input for FP8

- Data collection: Partly on line input (part of the full participatory policy.)

FP 7 evaluation

- Evaluate projects:
  - list of **all** topics: look "across the border"
  - Interim evaluation of projects (somewhat) weak.
- Impact of evaluation results depends on:
  - Real demand for improvement
  - Openness to accept negative statements
  - Involvement stakeholders: scope, questionaire
  - Resisting attempt to "smoothen" the outcome.
- Budget: not available, research is funded

Round Table

- Italy:
  - ex ante. Based on ministerial nucleus. Long-term industrial evaluation show little innovation. Since 1998 no energy strategy, as such a lack of evaluation base.
  - Transition to gas non governmental.
  - On research level good examples are available.
  - Geothermal energy is overlooked.
  - Little coordination between pull and push.

Round Table

- UK:
  - Produce evaluations that are used!
  - Evidence based policy is gaining importance.

- Austria
  - It has a cultural element: is evaluation to punish or to learn.
  - Change due to EU regulations
  - Project manager now have to look at the original plan.
  - Beware of the the translation from evaluation to message... and ask for written reaction

Round Table

- Denmark
  - Add sociology to hard core technology.
  - Good exchange off exchange between evaluators.

- Netherlands:
  - Programmes start to soon after evaluation: no time to adjust.
  - Evaluations in governmental programmes in-process are "part of the process"
  - Focus of evaluation sometimes Policy driven: more emphasis on industry

Round Tabel

- New Zealand
  - On the moment no official national evaluation
  - Evaluation in research centres: policy influenced.
  - No ex-post at all. Strongly influenced by lack of capacity

- Norway
  - 8 Large scale programmes with good evaluations . Partly done by the research council.
  - Also overall evaluation over all programmes.
  - Evaluation used as important input.

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Round Table

- **Germany**
  - Ministry based
  - Environment: large study +1000 pages.
  - Economy 2 low cost studies. Good evaluation on fuel cells, studying part of the programme.
  - E-mobility is an upcoming priority.

- **Belgium**
  - Federal country, R&D regional responsibility, with the exception of nuclear.
  - PV is the most important topic.
  - Not a good allocation of time/money to evaluation
  - Don't loose opportunities

Round Tabel

- US
  - Death by evaluation
  - 2000: 34 advisory boards (independed, external)
  - Congressional hearings (budget cuts)

- Internal evaluations
  - Unpopular: we only want to hear success stories
  - Gaps analyses tend to be not to critical / sustainable
  - Beware of stovepipes and sponsors

General remarks

- Matrix

So let's give good advice!