



Sustainable EU Research Infrastructures

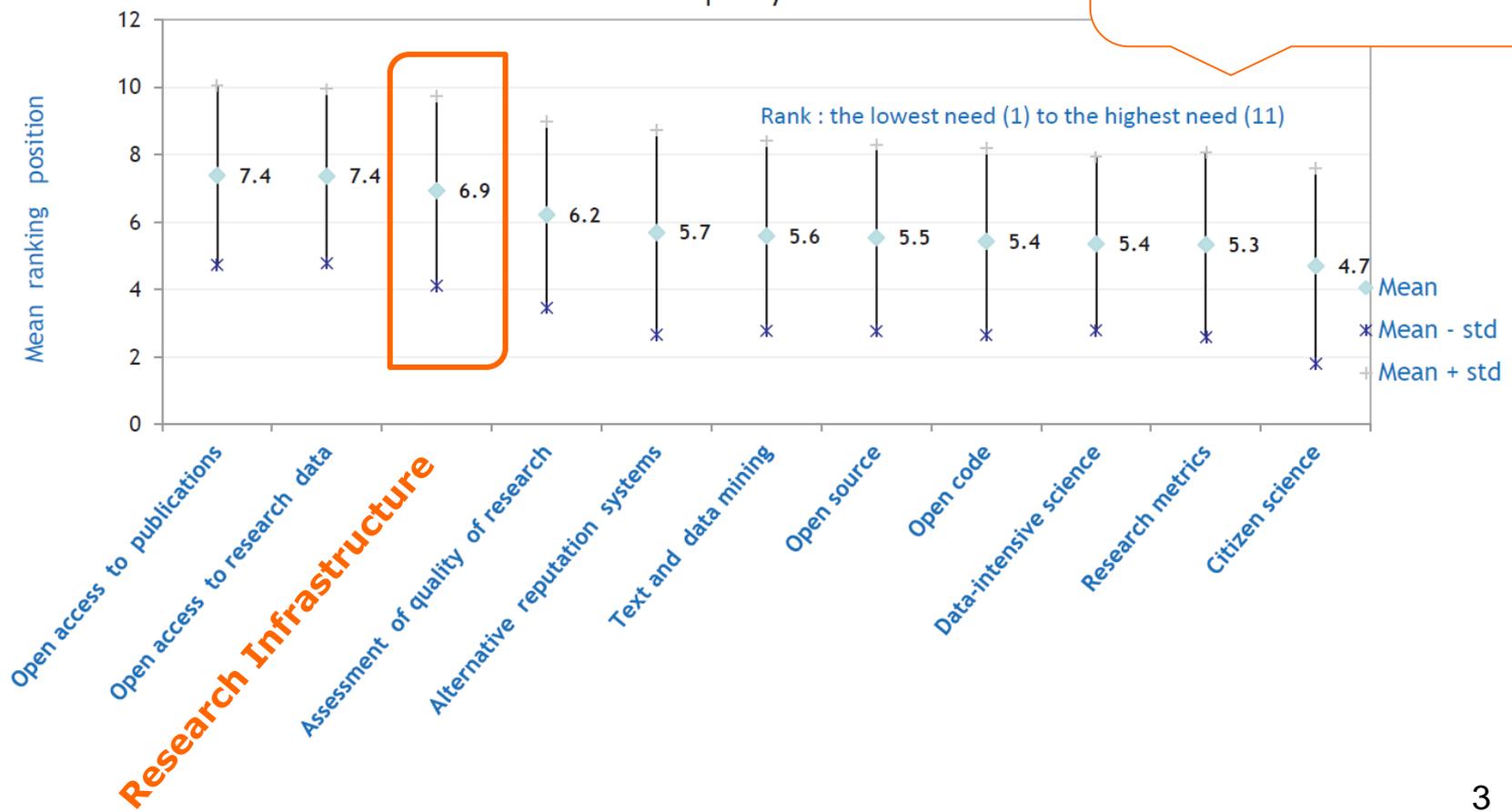
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The key question: Long-term sustainability

- There is **now** a need to take the next steps for a more comprehensive approach and **long term vision to RI**, fully using their potential to deliver.
- Pre-conditions for the long-term sustainability of RI scientific excellence, training and access, innovation potential, interaction with industry, socio-economic impact, data management, governance and funding models as well as international cooperation.

**Public consultation
on Science 2.0:
Science in Transition**

On what issues within 'Science 2.0' do you see a need for policy intervention?



EU – policy context

- New Commission, New priorities:
 - **OPEN INNOVATION** Create conditions to capitalise on results of R&I
- Digital Single Market
 - **OPEN SCIENCE** Boost excellence in cutting-edge, fundamental research – The Cloud Initiative
 - **OPEN TO THE WORLD** Reinforce EU international engagement



Priorities for RIs



Facilitate investment in RI: towards long term **sustainability**

Increase scientific excellence and effectiveness
(planning, decision making, governance, management, cost control...)

Exploit the innovation potential of RI

Maximise research results (data)

Stairway to excellence (train and attract young talents, facilitate **transnational access**)

Long term sustainability



- **RI**, including e-infrastructures, require **long-term investments for their construction and operation**, and a systematic approach to **energy management** will become important to the allocation of budgets.
- Therefore, **energy may be one of the strategic factors in long-term sustainability of RI** and can remain so for the future, for reasons of cost and environmental goals.



Energy management in sustainable RI lifecycle

- Not an easy process and not a one-time project.
- Requires time and should follow the never-ending circle process of four continuous steps: planning, doing, monitoring and improving.



Challenges

- Increase of energy efficiency
- Energy system optimisations
- Implementation and management
- Potential future technological solutions
- Tools for effective collaboration

Opportunities

- The **negative externalities that are associated with energy** consumption, often in the form of emissions of GHG and other pollutants, provide the basis of numerous policies aimed at reducing energy consumption.
- Facilitation of investments and developing **complementarity between different EU funds**
- **International dimension** of EU RI supporting operational cost by more non-EU members



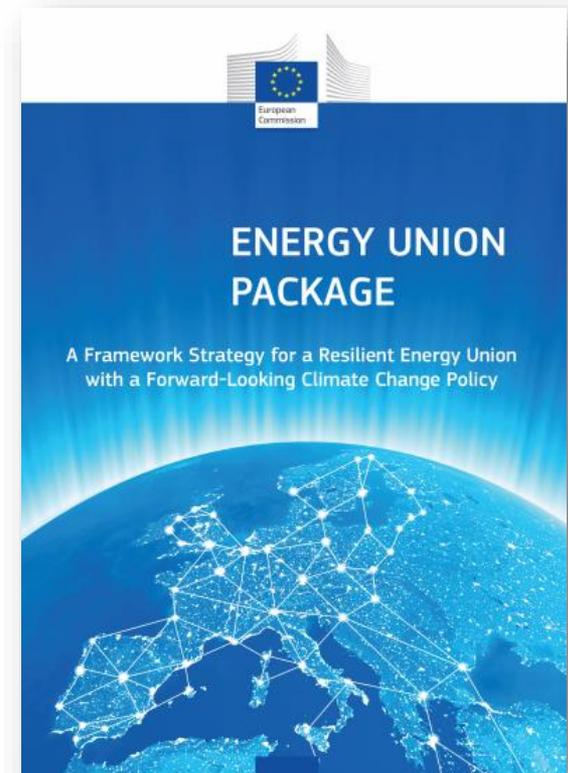
Energy Technology (SET) Plan Energy Union

Building up on the momentum

- Opportunity to **promote new approaches for managing energy efficiency**. Are RI concerned?

Integrated Roadmap (SET Plan)

- RI to support **to higher education and lifelong learning**: Ensuring access to research infrastructures, pilot and demonstration facilities to support education and professional training.



What can be done: 2016 opportunities under Horizon 2020



- **IA** - Networking RIs + transnational access
- Developing **new RI** concept: **design studies (bottom-up!)**
- Further opportunities: **Societal Challenges** calls for collaborative **research topics**

This workshop: discuss and take opportunities!

Key messages - conclusion

- ❑ **Facilitate strategic RI partnerships, including global RI** towards better **effective** energy management.
- ❑ **Facilitate** access to financing (EIB/InnovFin), Horizon 2020 for **energy efficiency** activities in RI, as part **of long term sustainability plans**.
- ❑ **Encourage** RIs to offer regularly **dedicated training**, including energy management.



Useful links:

European Commission - Research Infrastructures:

https://ec.europa.eu/research/infrastructures/index_en.cfm

Draft work programmes 2016-17, Research Infrastructures:

https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/04.%20INFRA_2016-2017_pre-publication_0.pdf

Draft work programmes 2016-17:

<https://ec.europa.eu/programmes/horizon2020/en/draft-work-programmes-2016-17>

Horizon 2020 Participant Portal:

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

Energy Union:

http://ec.europa.eu/priorities/energy-union/index_en.htm

Thank you for your Attention!

HORIZON 2020

