



European Green Deal Horizon 2020 Call

LC-GD-9-1-2020 **European Research Infrastructures** capacities and services to address European Green Deal challenges

Area 9: Strengthening our knowledge in support of the European Green Deal

**“...longer-term perspective while also acting as a bridge to
Horizon Europe.”**

**9.1 European Research Infrastructures
capacities and services to address European Green
Deal challenges**

**9.2 Developing end-user products and services for all
stakeholders and citizens supporting climate adaptation
and mitigation**

**9.3 Transparent & Accessible Seas and Oceans:
Towards a Digital Twin of the Ocean**

European Research Infrastructures capacities and services to address European Green Deal challenges

Mobilise world-class capacities and resources notably those provided by European Research Infrastructures (RIs), to support breakthrough solutions in **energy storage** and advance **climate/environment monitoring and observation**.

Deadline **26 January 2021** – Budget **€28 million** - RIA

Proposals will address one of the following subtopics:

(a) Support Europe leadership in **clean energy storage** technologies

Effective & customised **access** to the best research infrastructures - €7m

(b) Enhancing European research infrastructures for **greenhouse gases observation** in and around cities

notably anthropogenic CO₂ emissions (**cities**; also other large emissions sites such as industrial sites, transport infrastructures) - €13m

(c) Enhancing **observations** for **air quality** and **citizens' health** in urban areas particles and their precursors, **nanoparticles** - €8m

European Research Infrastructures capacities and services to address European Green Deal challenges

Expected impact (common to all three subtopics):

- The development of **synergies** among **research infrastructures** in different disciplinary areas, including social sciences, and improved, optimised and harmonised research **services to address Green Deal objectives** will foster economies of scale and improved use of scientific resources across Europe and beyond.
- **Users**, both from the scientific and industrial community, will benefit from **integrated and efficient access** to the best research infrastructures as well as from advanced research **services addressing their specific needs**.
- RIs will foster the development of **new skills** and a new generation of researchers ready to optimally **exploit the most advanced and essential instruments and resources** for research and innovation addressing Green Deal challenges

(a) Support Europe leadership in **clean energy storage technologies**

Scope (highlights):

- coordinated and integrated provision of transnational and virtual **access**; facilitate and integrate the access procedures
- improve and customise the **services**
- complementary and interdisciplinary facilities, **various TRLs, whole value chain**, advanced instrumentation and scientific methods
- support to **users...**

Expected impact (highlights):

- enable **breakthrough research and innovation** in energy storage across the whole value chain and in line with a life-cycle approach, in view of possible industrial applications
- **competitive research and industrial energy storage ecosystem** (including advanced materials and modelling, chemistry, systems, advanced manufacturing, reuse and recycling...)

➤ ...

(b) Enhancing European research infrastructures for greenhouse gases observation in and around cities

Scope (highlights):

- **Scientific and technical work** (engineering plans, testbeds for instrument arrays, data management...)
- Conceptual work (integration into the existing European research infrastructures, estimated budget, **funding plans**)
- **Pilot implementation** in at least one representative urban site (engagement of authorities, complementary measurements systems, quality control, traceability, site selection)
- **Roadmap** for upscaling...

Expected impact (highlights):

- enable **evidence-based sustainability strategies**, through the provision of interoperable data, tools and models
- strengthen and sustain **Copernicus in-situ** component
- ...

(c) Enhancing observations for air quality and citizens' health in urban area

Scope (highlights):

- **Scientific and technical work** (incl. measurement of maximum exposure to nanoparticles, data management...)
- **Pilot implementation** in at least two representative sites (engagement of authorities, complementary measurements systems, mobile instrumentation, citizens' observatories, sites selection...).
- **Roadmap** for upscaling...

Expected impact (highlights):

- ability to assess the **impact at city scale** of policy implementations initiated at city, national and European levels with respect to **air quality, citizens' health**
- boost **multidisciplinary research** and innovation actions to understand the **potential health damage of nanoparticles**
- ...



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Disclaimer:

these slides provide few highlights on topic LC-GD-9-1-2020 and are not binding. Please refer to published Horizon 2020 Work Programme 2018-2020 section 20. Cross cutting activities as legal reference: European Commission Decision C(2020)6320 of 17 September 2020.