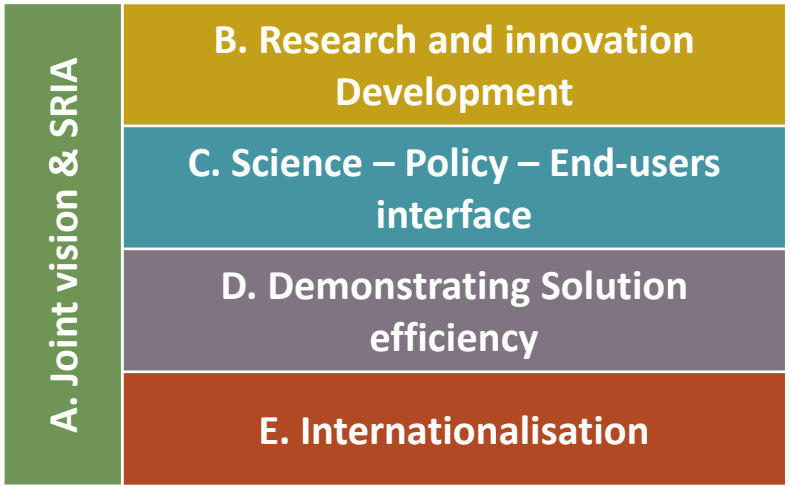
Contribution to the Green Deal of a Geological Service for Europe *from a Water perspective*

20/01/2022

Concluding GEO-ERA Conference

The Water4All partnership

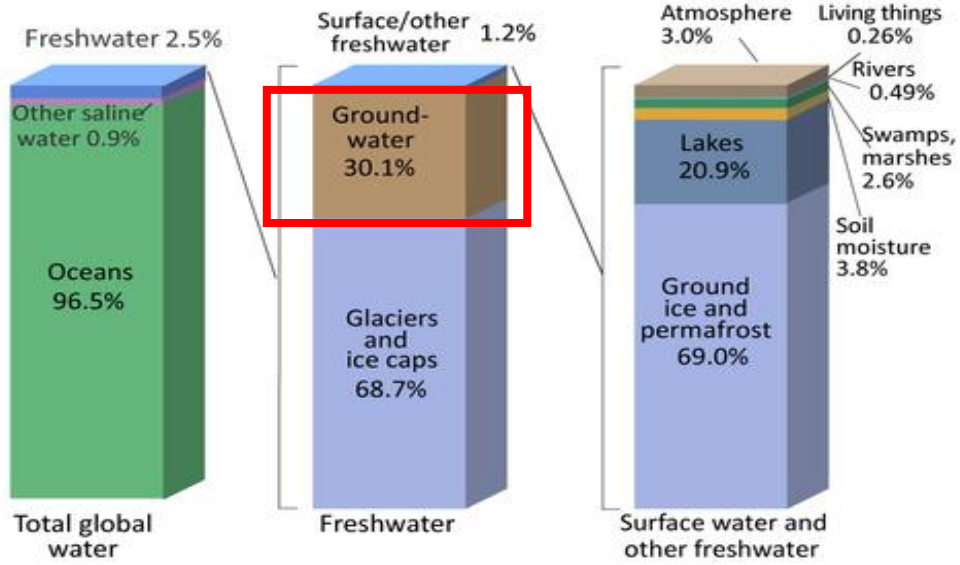
- Concentrating **research and innovation** and the funding landscape of **water** in Europe and beyond
- **70+** partners from **28** countries
- 6-10 years



- Enabling **water security for all** on the long term by boosting systemic **transformations** across the water R&I pipeline**, fostering the matchmaking between problem owners and solution providers**
- Speed up the achievement of the **water**-related components of **EU Green Deal** and the **UN SDGs**

The importance of (ground)water in the Green Deal

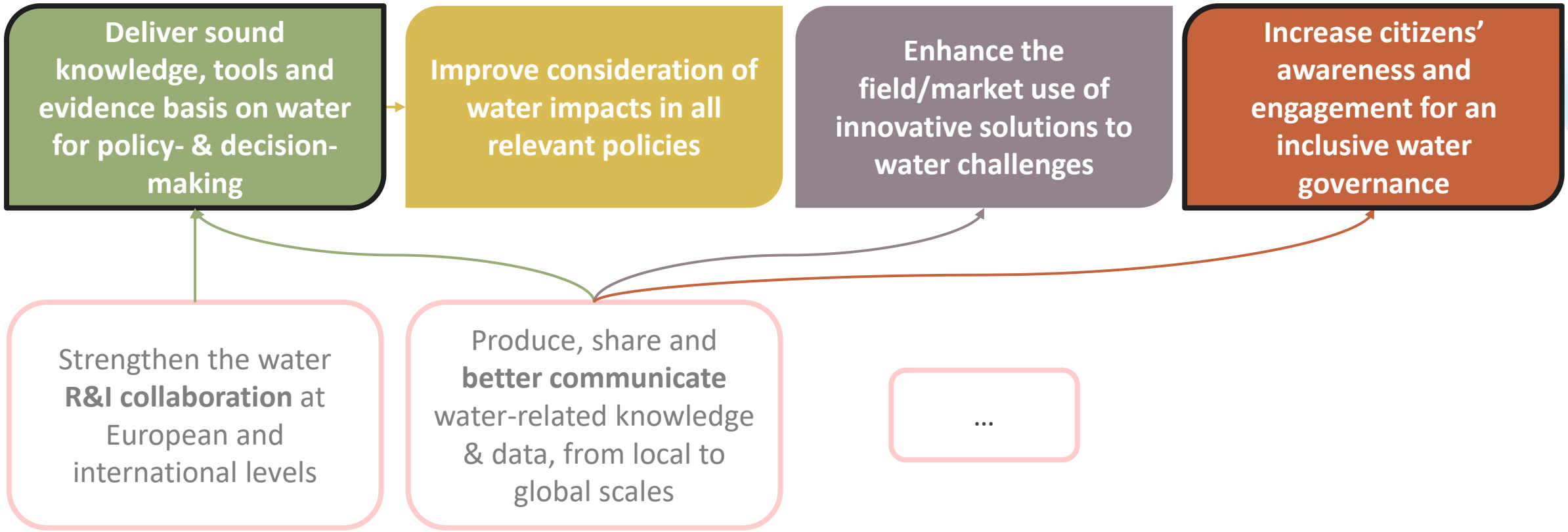
The European Green Deal (COM/2019/640 final)



Distribution of Water resources on Earth (Shiklomanov, 1993)

«Water is central to all EU Green Deal components»
(Daniel Calleja Crespo, DG ENV, Dec. 2019)

Water4All specific objectives *(extract)*



Key challenge 1 for (ground)water

- Need for **integration** and **continuity**
  - Geographical / transboundary continuity
  - Groundwater – Surface water – Marine water
  - Across sectors (agriculture, energy, biodiversity, health, industry…)

→ Work in **connection** with other initiatives:
  - Blue economy partnership, Oceans & Waters mission, Copernicus services…

Key challenge 2 for (ground)water

- Need for central access to **harmonized**, homogeneous **information**

→ Deliver the **knowledge infrastructure** providing the evidence-basis regarding groundwater to **support decision-making**

  - Data
  - Indicators
  - Forecast models
  - Water quantity and quality management
  - Trade-offs with other sectors

Key challenge 3 for (ground)water

- Need for **operative** knowledge and tools for **all users**

→ Work with a **user-driven** perspective

→ Think **inclusive**

→ Design the outputs to meet actors' needs

Some R&I needs for groundwater *from Water4All SRIA (publication in February)*

- Pluridisciplinary approaches to **assess** inland and coastal aquifer **resources at various space and time scales** to support decision-making and to safeguard groundwater resources and ecosystems.
- **Integrated groundwater management in urban areas** to control groundwater pumping / discharges and manage recharge. Nature-based solutions for water table control.
- **Models on groundwater recharge and water quality** projections in the context of climate and global change.
- **Governance** of water management, incl. financial resources for proper implementation (data acquisition & monitoring).