



Scaling up digital innovations for climate action

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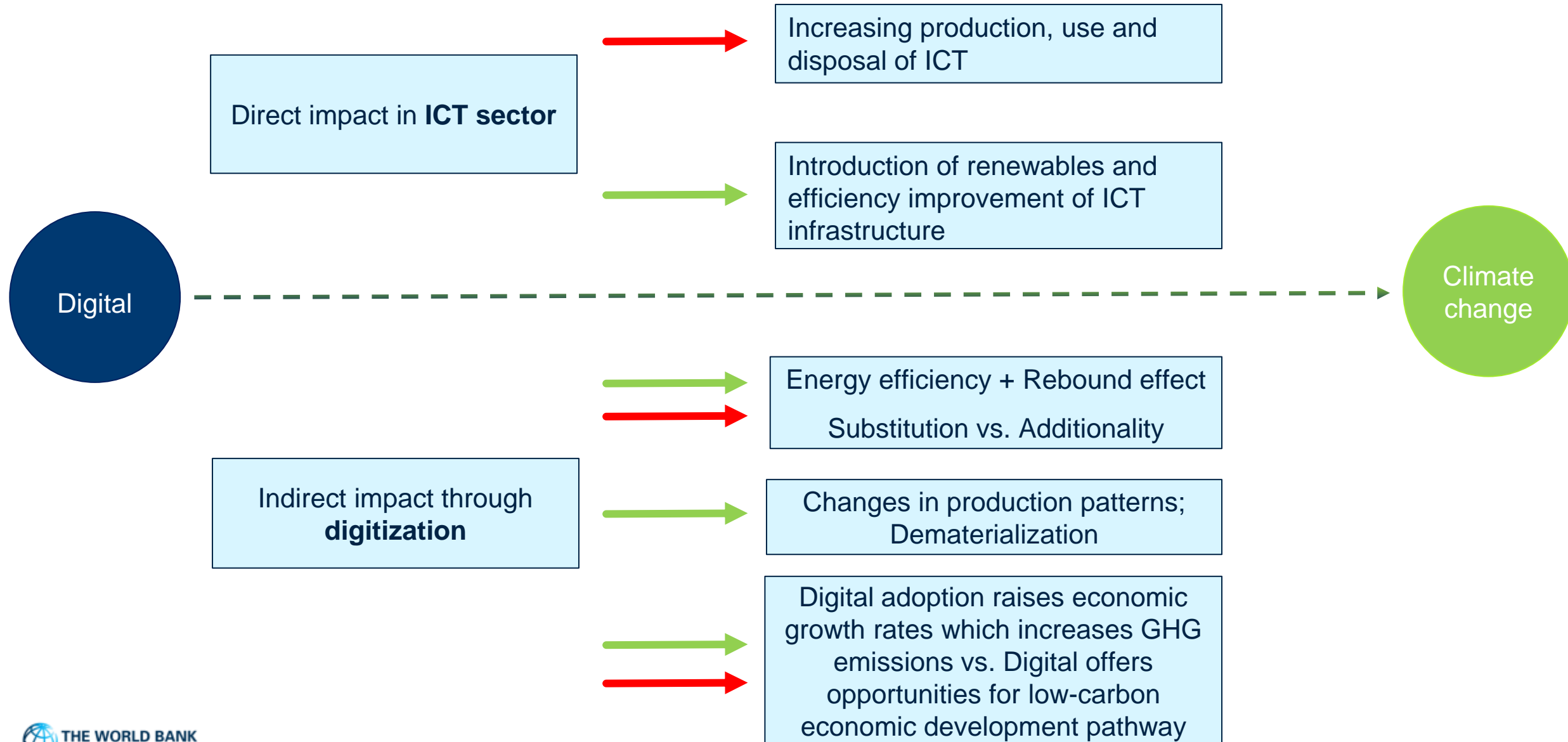


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Is climate change a **risk** for LAC? Yes, but it is also an **opportunity!**

- The year **2020 was the second warmest year for South America**, 26% of the Pantanal burned, the Atlantic basin cyclone season registered a total of 30 storms.
- **By 2030**, climate change could push an estimated **2.4-5.8 million people into extreme poverty in LAC**.
- **Over the last two decades**, climate related disasters have cost Latin America the equivalent of **1.7% of GDP every year**.
- **By 2050**, without concrete climate and development action, over **17 million people in LAC could be forced to move** within their own countries to escape the impacts of climate change.
- **By 2030**, changes in production and consumption necessary to be on track for full decarbonization could result in **15 million more jobs in LAC**.
- Transition to a **low-carbon**, resilient economy is **an opportunity for inclusive development**. As part of recover from the COVID-19 crisis, climate action can help create better livelihoods and economic opportunities for the poorest and excluded population.

How does digital impact climate change?



Digital opportunities mitigation: Energy, urban, transport, agriculture

Agriculture

Resource efficiency through greater production control, precision agriculture to reduce energy use and N₂O emissions, efficient feeding strategies and monitoring of animal health, greater customization of production, inventorying of natural resources, enable information flow to consumers to support low-emission agriculture.

Urban

Cities are the ideal testing ground for digital climate innovation. From AI for improving building energy efficiency to remote sensing for mapping land subsidence, cities globally have begun piloting both mature and frontier digital technologies toward climate change mitigation and adaptation.



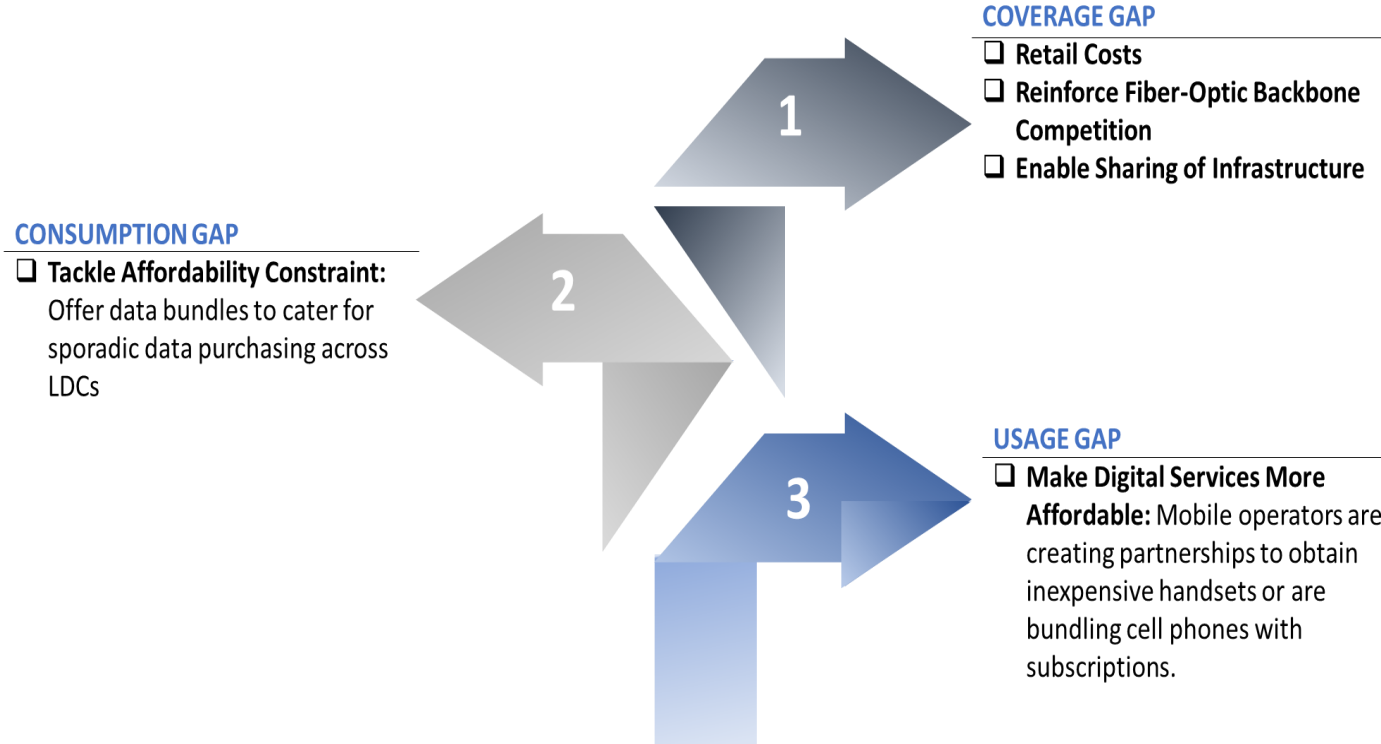
Transport

Digital technologies can facilitate the deployment of electric vehicles, inspire mobility as a service, support travel demand mgmt., enable smart signal systems, all of which can help reducing GHG emissions.

Energy

Digital can enable large scale integration of renewable energy in the power sector allowing huge volumes of data to be managed and more complex systems to be optimized. Smart Grids with advanced automation, control, IT and OT systems that enables real-time monitoring and control of power flows.

How to use the digital opportunities for climate action: Closing the connectivity gap as a first step

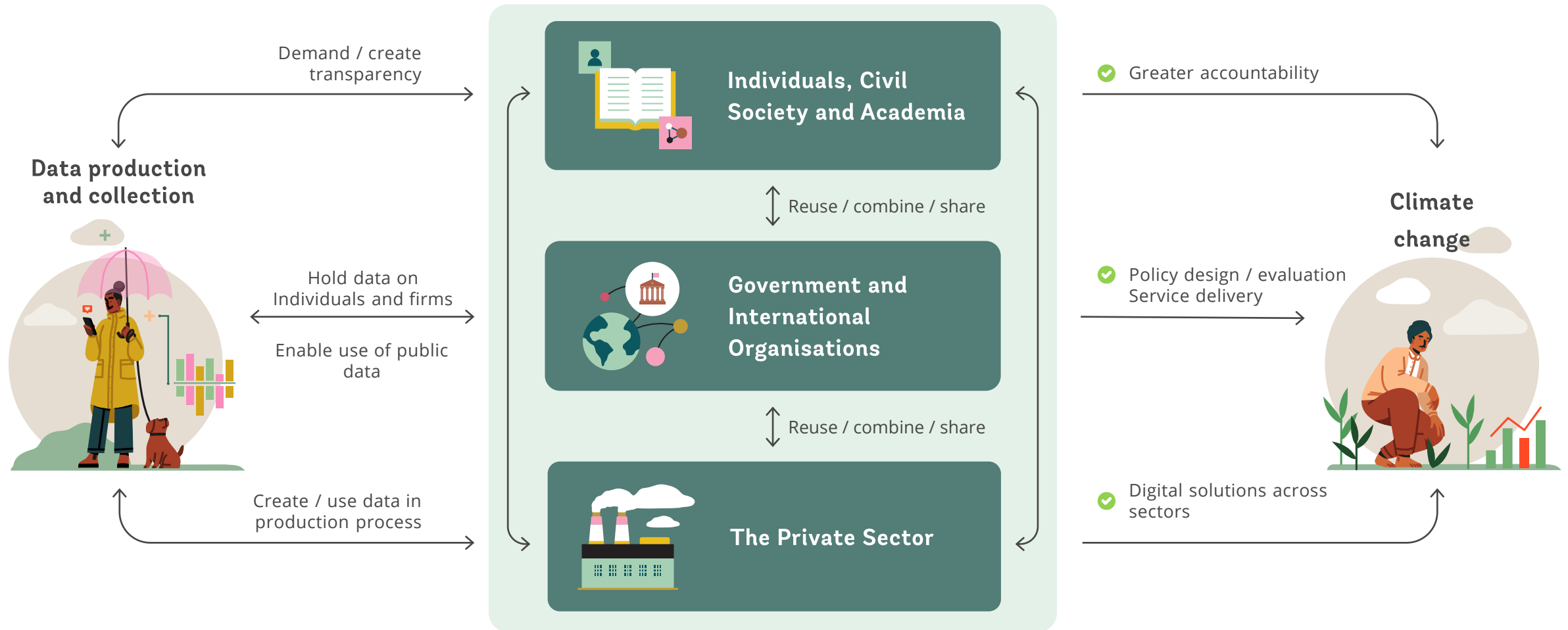


Broadband infrastructure investments are a **prerequisite** for providing access to the **digital technologies** needed to decarbonize the economy

Despite significant growth in broadband connectivity, **37%** of the world's population is still **offline**, **96%** of them living in developing countries. Only **13%** of internet users in rural areas of least developed countries.

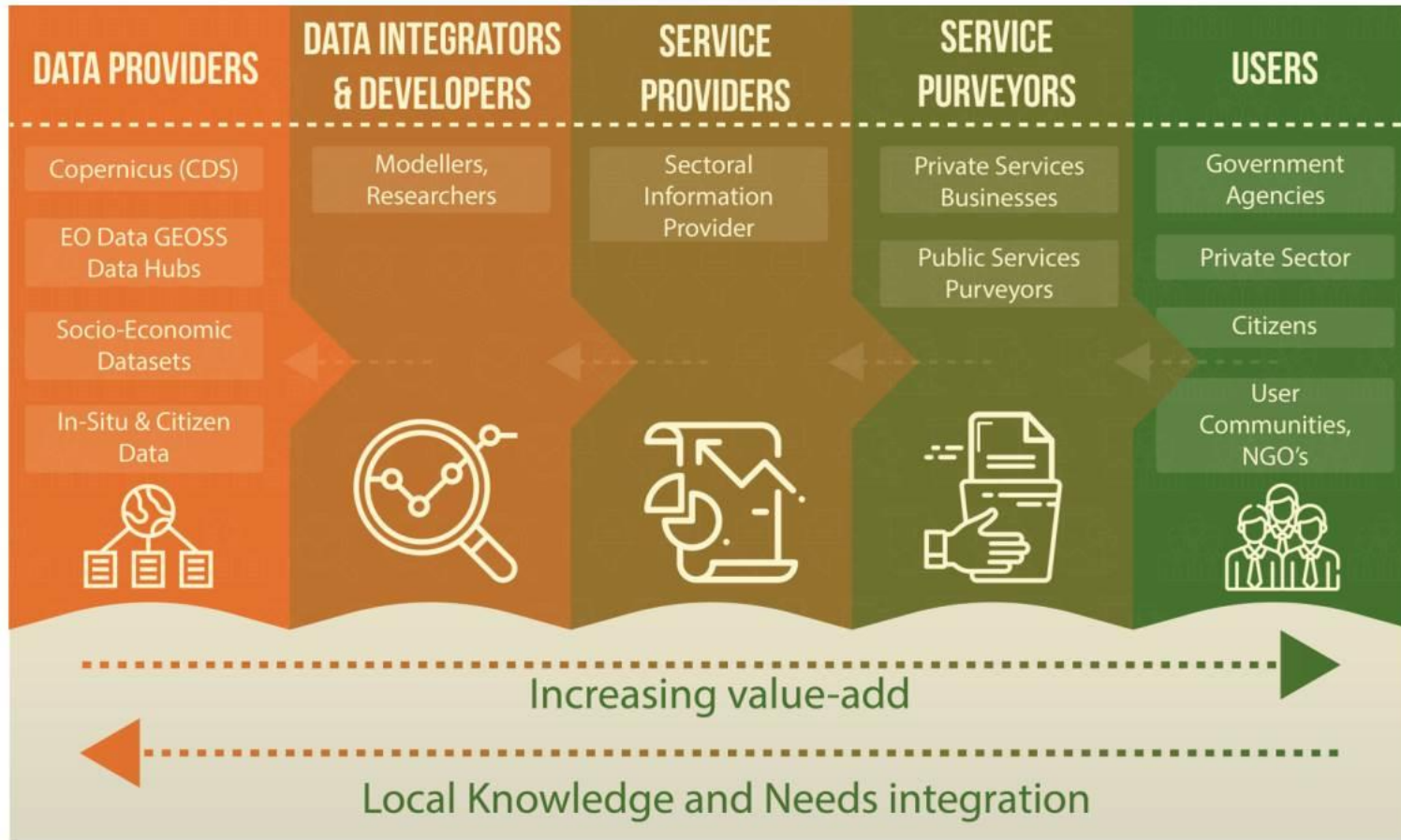
Governments, together with network operators and service providers, will therefore need to address the **disparities in access, adoption and affordability of broadband**

How to use the digital opportunities for climate action: Enabling climate action with data



How to use the digital opportunities for climate action: Create digital platforms and leveraging emerging technologies

The Climate Service Value Chain



Source: IHE Delft

- The role of digital in the climate change requires a new approach, particularly in regards to emerging technologies.
- The climate service value chain involves various data and technology platforms.
- A multi-stakeholder governance ecosystem is essential together with regulatory tools to foster innovation (e.g. sandboxing).

It's not all about technology: Digital capabilities and skills for leadership, participation and entrepreneurship are important

Digital Culture



- Legacy culture and mindsets are identified a barrier to digital transformation
- Culture impacts the digital transformation – not only a question of technology

Digital Skills



- There is a wide digital skill and digital literacy gap
- Digital skills are a prerequisite for citizens, professionals, civil servants and policy makers to reap benefits of digital for climate action
- Strong digital skills allow for development, uptake and diffusion of digitally enabled climate solutions

Digital Leadership



- Leaders are the prime agent of change creating a vision for digital transformation in support of decarbonization
- Deciding on the digital strategy for climate change and its implementation
- Creating a fit for purpose governance
- Developing fit for purpose digital capabilities

Thank You



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