



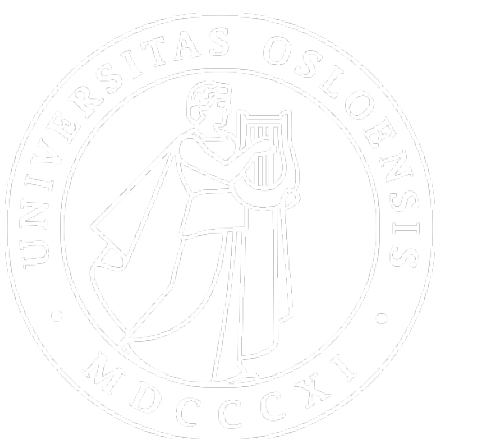
UNIVERSITY OF OSLO

C20 Environment, Climate Justice and Energy Transition Working Group (ECEWG)
with C20 Education, Digitalization, and Civic Space Working Group (EDCSWG)
1Dec2022

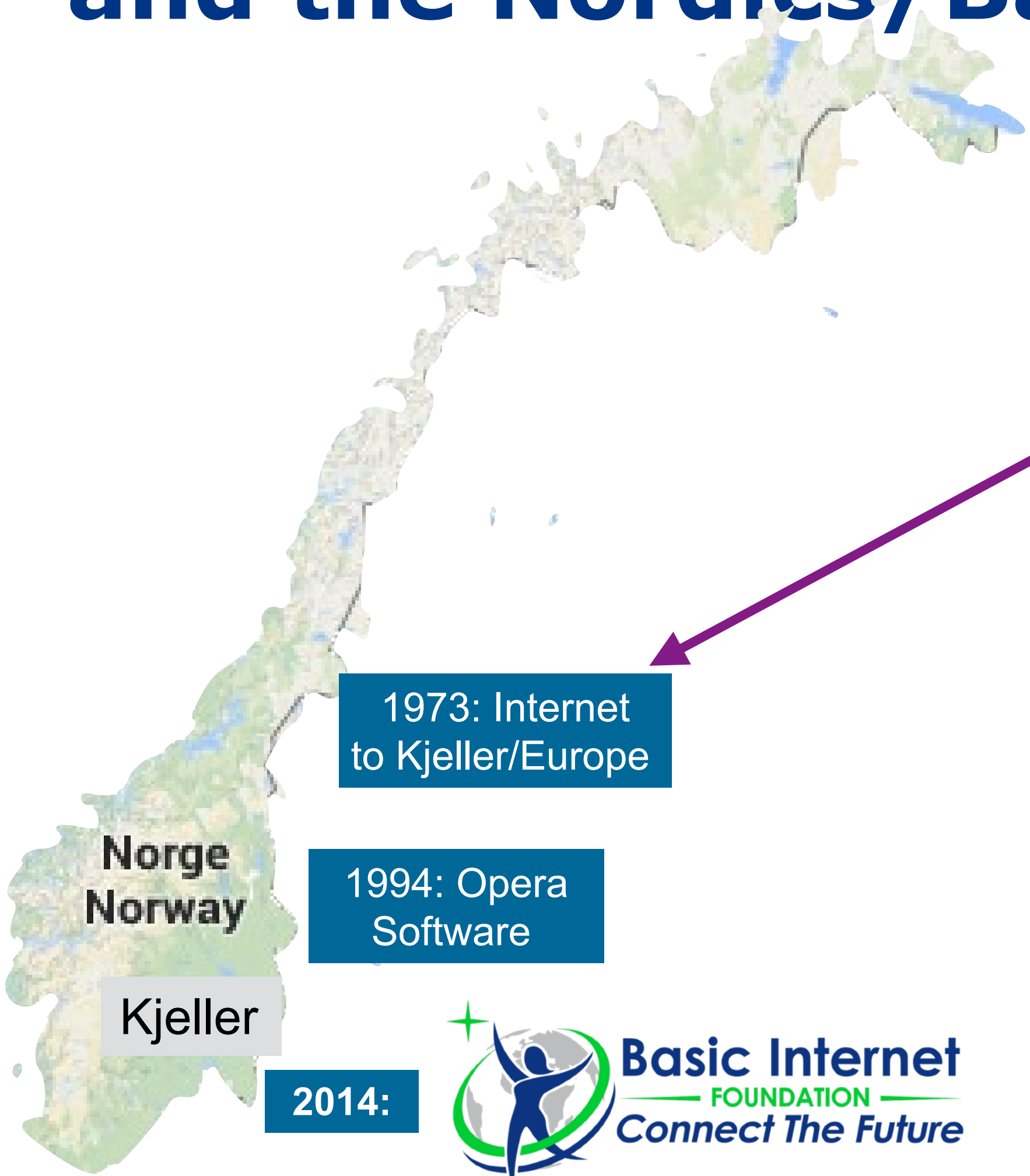
The Power of Digitalisation for Climate and Energy Justice in the Global South

Josef Noll

Professor, Department of Technology Systems (ITS)
Lead Digital Global Health at the Centre for Global Health (CGH)



Inclusive digitalisation in Norway and the Nordics/Baltics (N8)



1973: Internet to Kjeller/Europe

1994: Opera Software

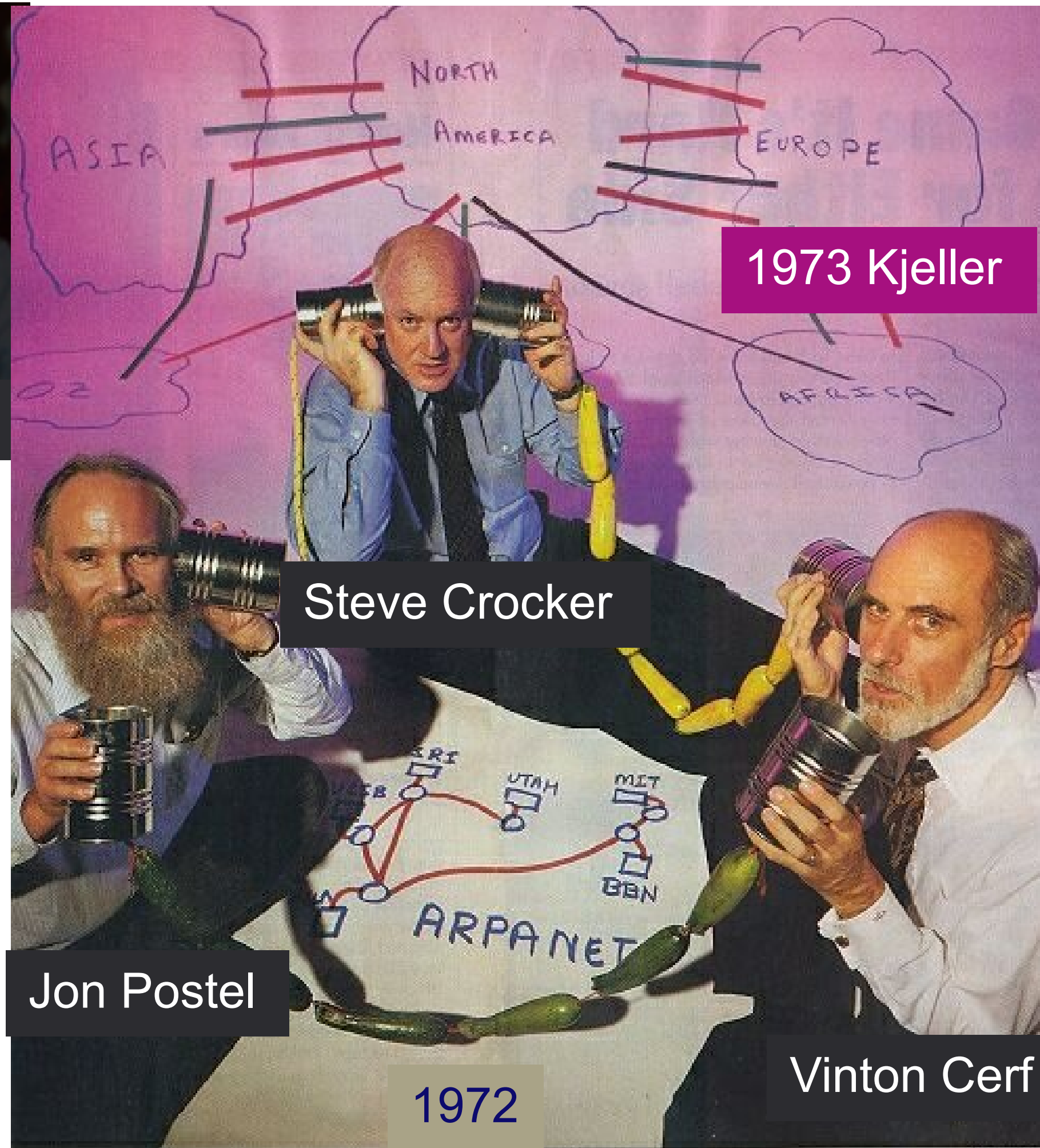
2014:



Yngvar Lundh

Pål Spilling

.php, OpenSource, Linux, Skype, Spotify
 Opera Software, FAST search
 Nokia, Ericsson
 GSM
 GovStack.global, X-Roads



1973 Kjeller

Steve Crocker

Jon Postel

Vinton Cerf

1972

Source: <http://www.michaelkaul.de/History/history.htm>

Recommendations (June 2019) United Nations High Level Panel

1A: We recommend that by 2030, **every adult** should have **affordable access** to digital networks, as well as **digitally-enabled** financial and **health services**, as a means to make a substantial contribution to achieving the **SDGs**...

1B: We recommend that a broad, multi-stakeholder alliance, involving the UN, create a **platform** for **sharing digital public goods**,



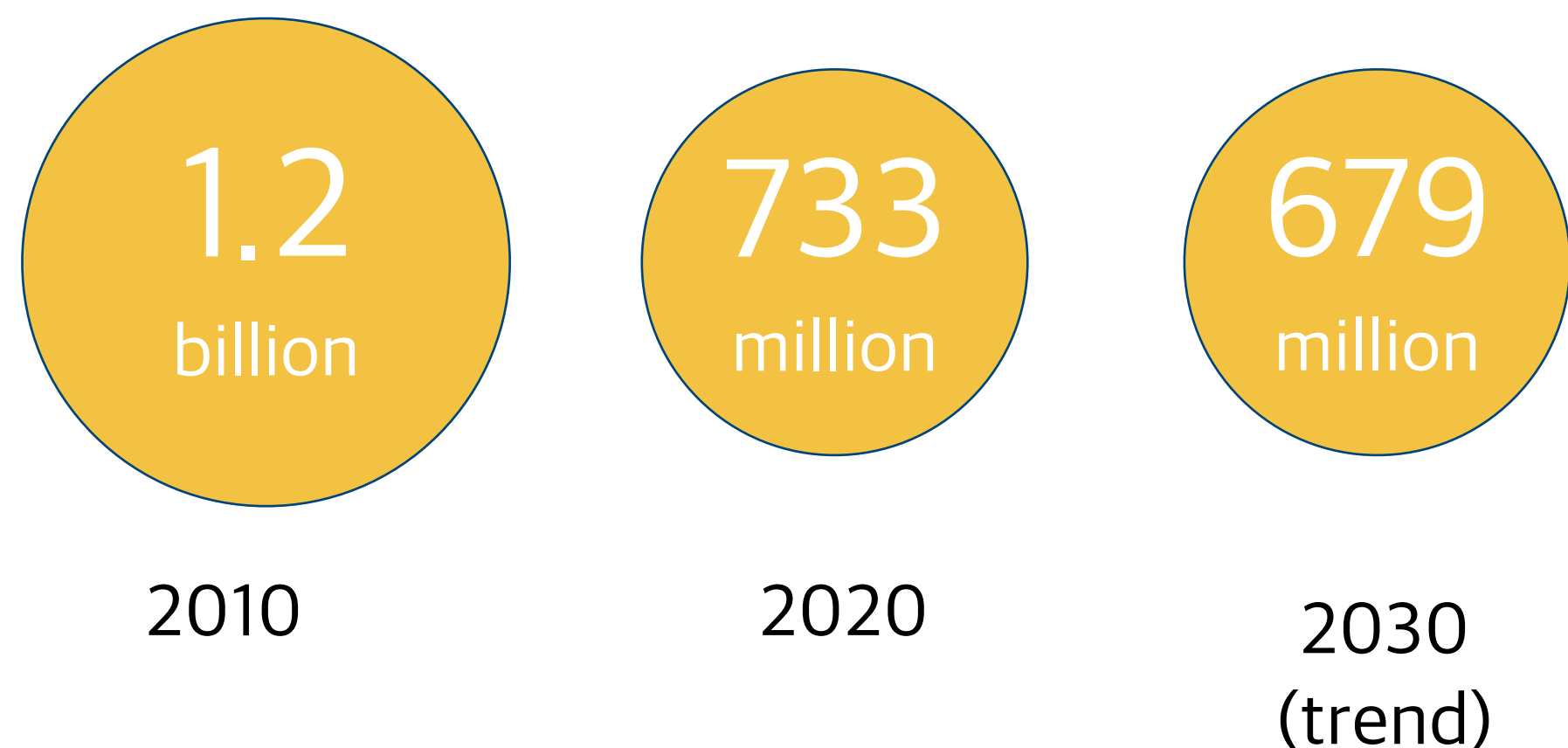
Energy & Digital, enablers for the SDGs

7 AFFORDABLE AND CLEAN ENERGY



People without electricity

SDG 7.1 calls for universal access to ... energy by 2030



[WorldBank 2021]

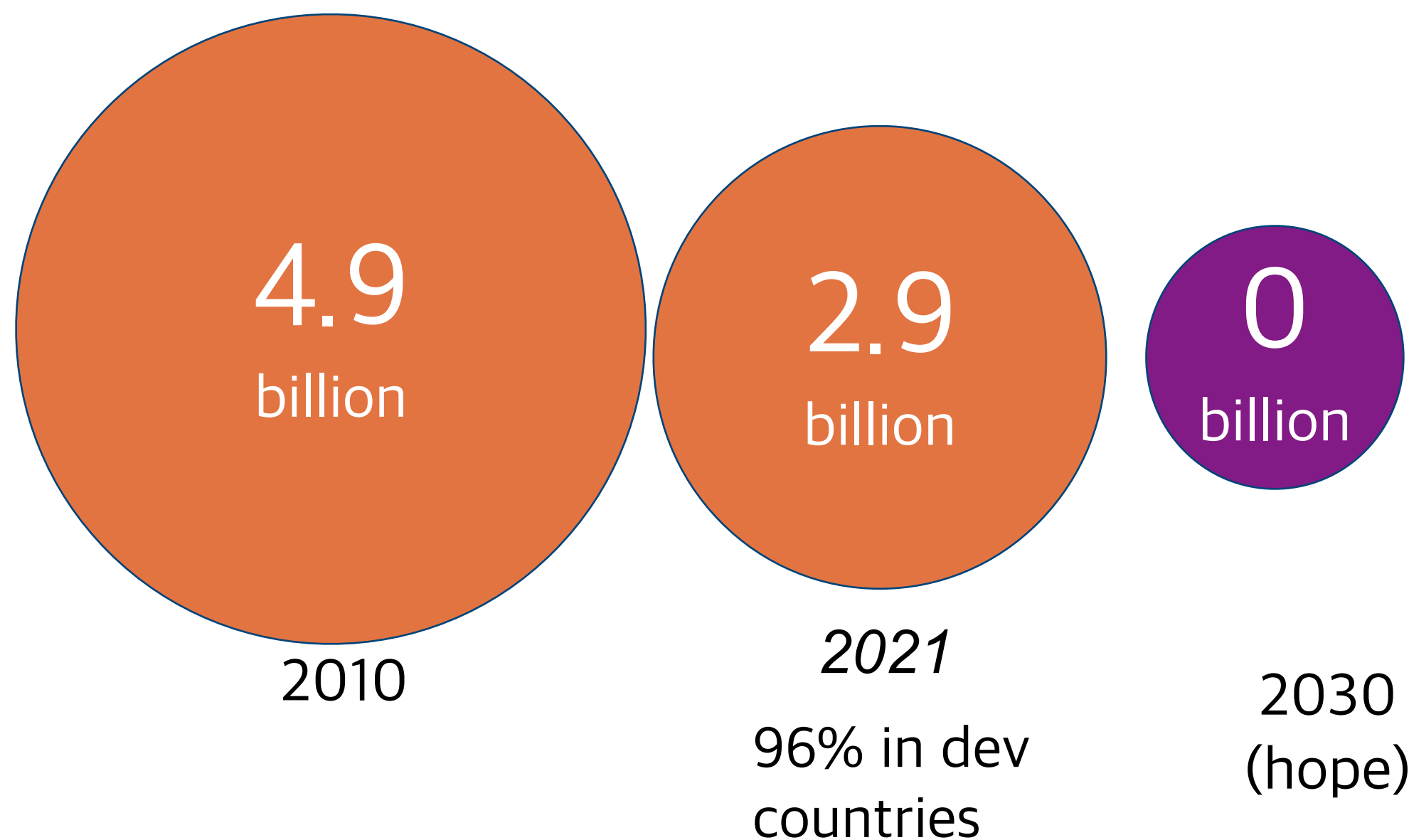
<https://www.worldbank.org/en/news/press-release/2021/06/07/report-universal-access-to-sustainable-energy-will-remain-elusive-without-addressing-inequalities>

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



People not using Internet

SDG 9c calls for universal, affordable internet access by 2020



[ITU 2010, 2021]

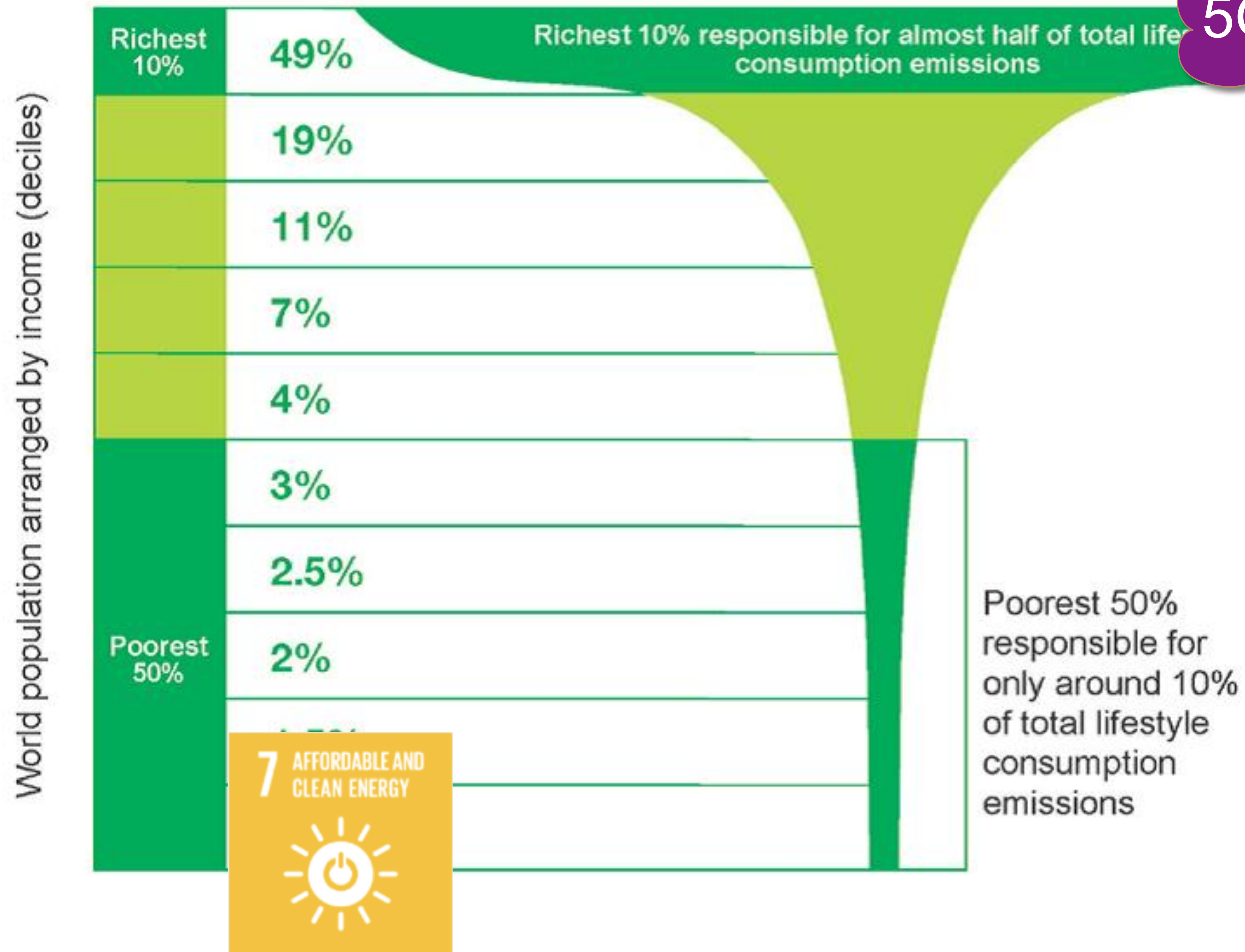
<https://www.itu.int/hub/2021/11/facts-and-figures-2021-2-9-billion-people-still-offline/>



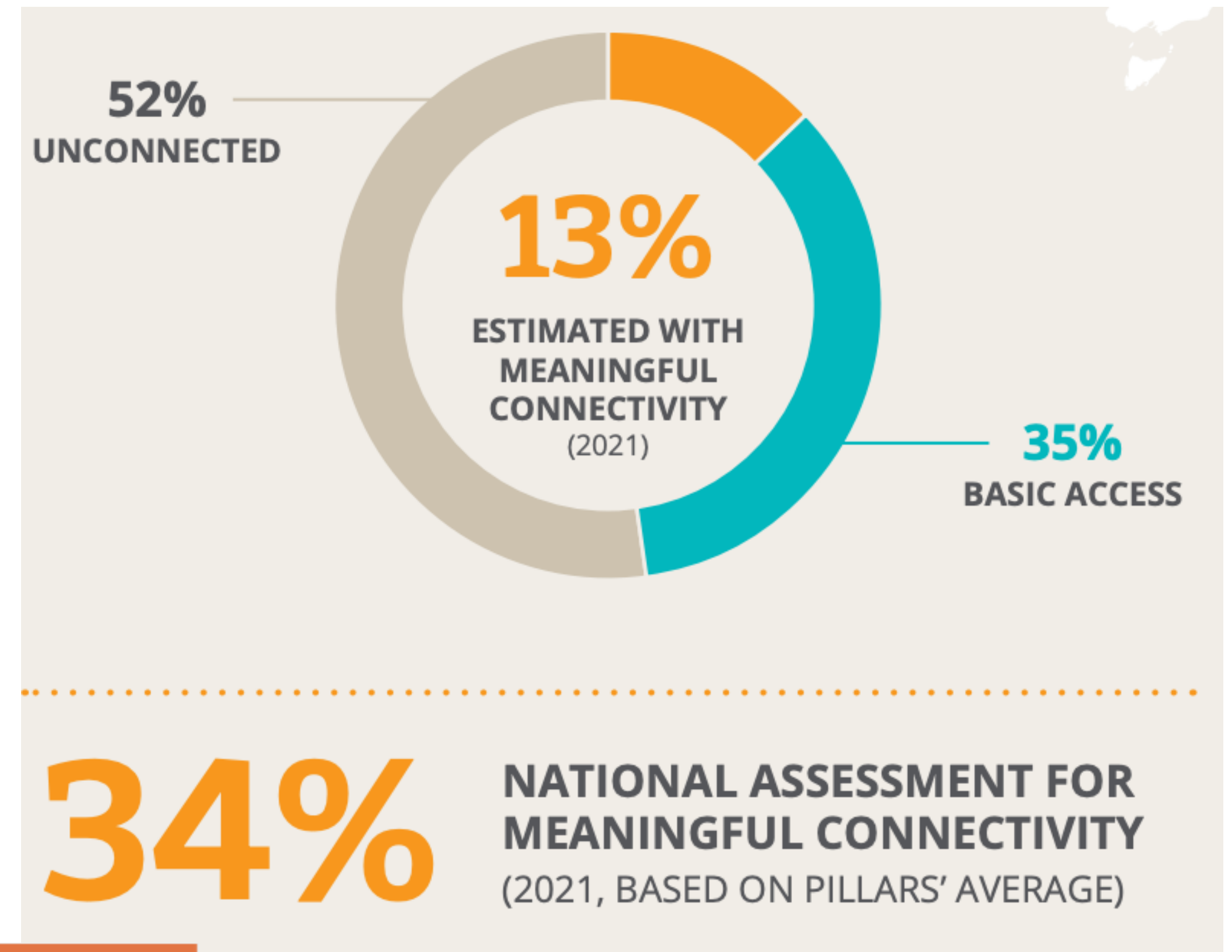
WSIS Forum 2022

Inequality in Energy & Digital Access

Percentage of CO₂ emissions by world population

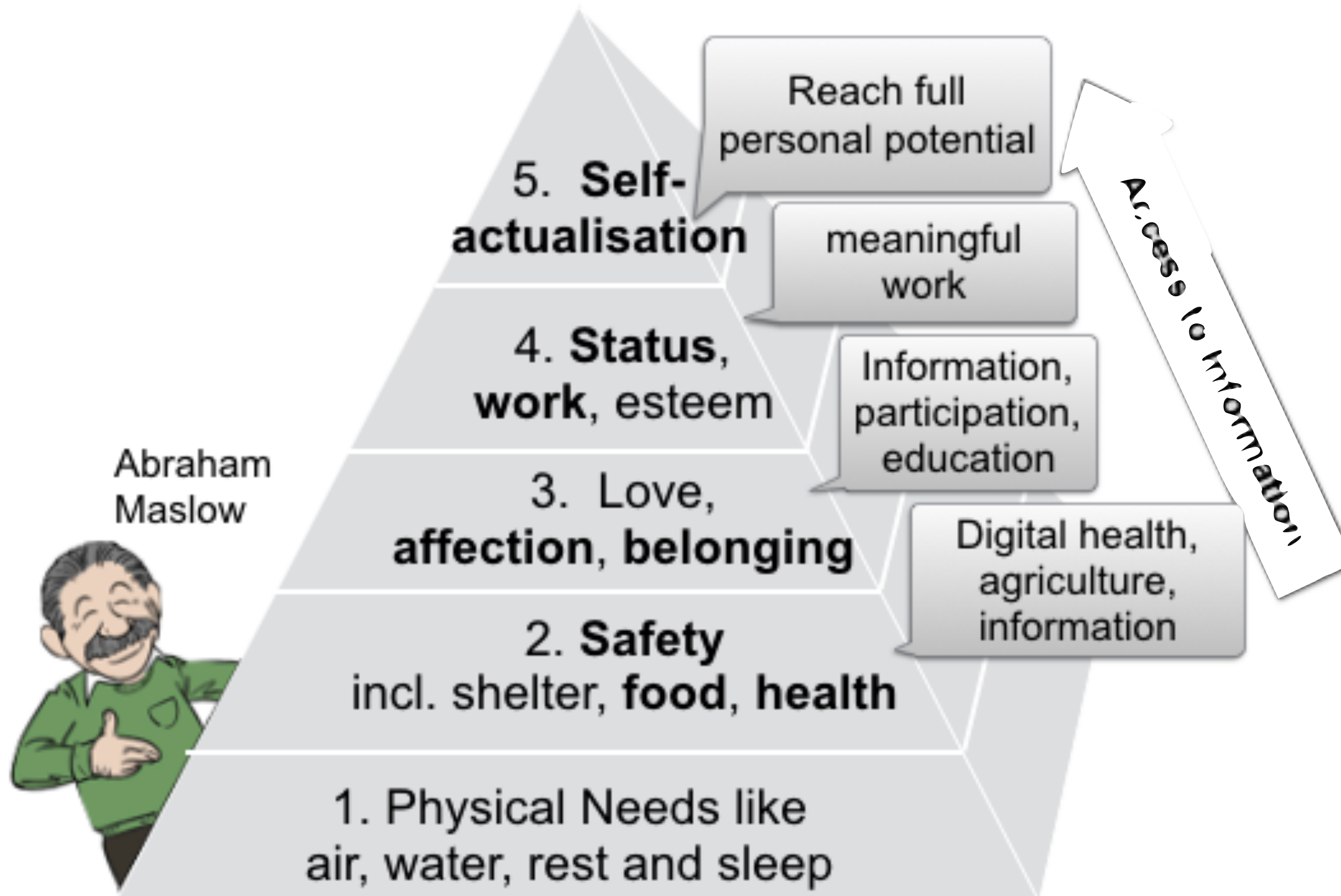


[Source: Oxfam.org, 2015]



[https://webfoundation.org/docs/2022/02/MC_Indo_FS_Screen_V1.pdf]

How to we reach every single human?



[adopted from: <https://shift-magazine.net/2015/11/17/the-economics-of-human-need/>]

- ➔ Digital Public Goods (DPGs) & GovStack
 - decentralised DPGs
 - digital transformation
 - GovStack for local governments
 - digital health empowerment?



Community involvement

for meaningful access tailored towards the needs & capabilities

→ WIR vs ICH (*we vs me*)

- **Werte** (*values*)
- **Inklusivität** (*inclusivity*)
- **Resilience**

Value creation
Trust & confidence

Explore, Affection
Opportunities

Empowerment, Work
Digital Transformation

Self-actualisation
Entertainment

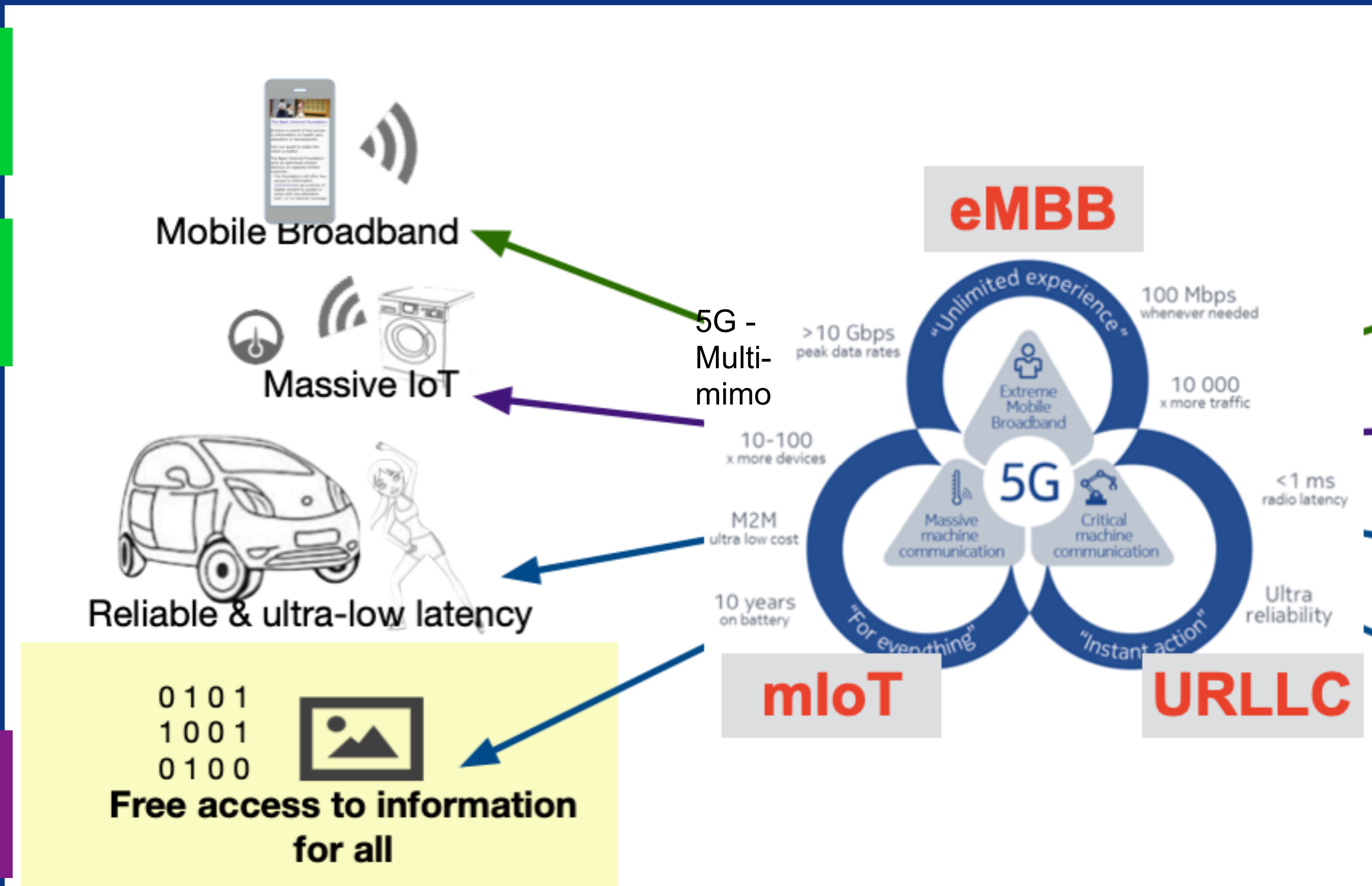


Need to change?

Road model: pedestrians & cyclists

Digital pedestrians, digital cyclists vs digital cars (broadband)

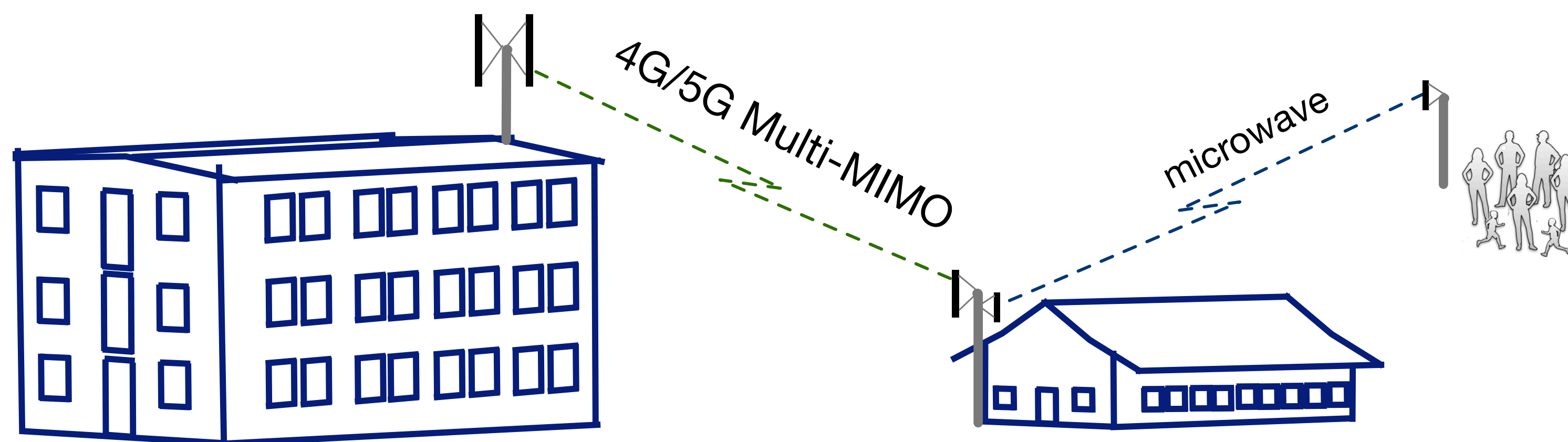
Internet Lite



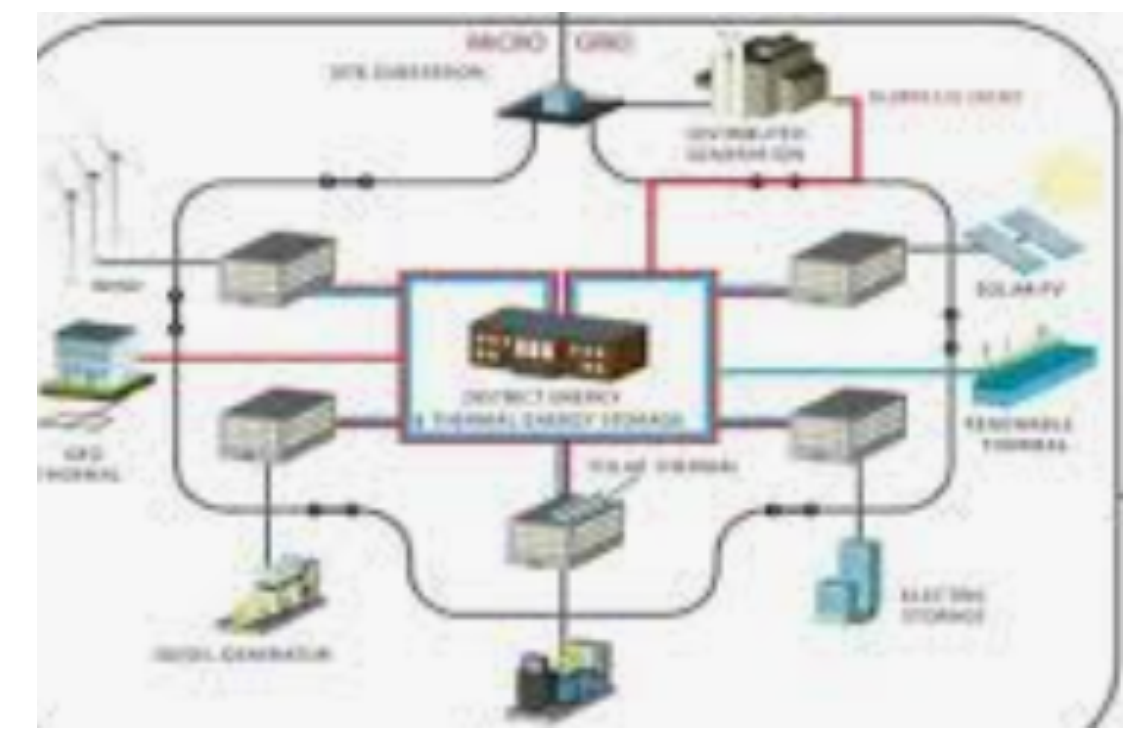
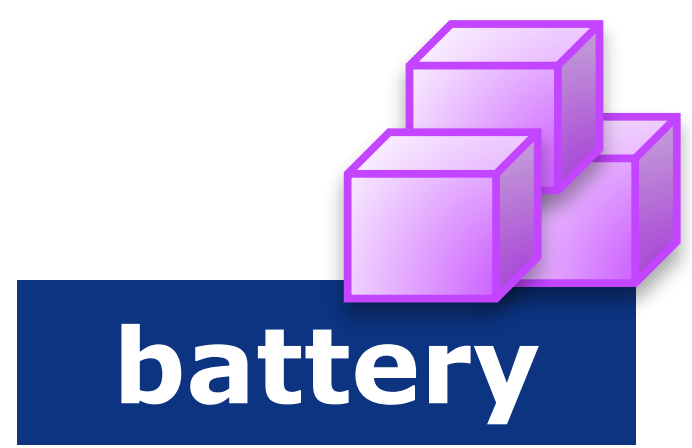
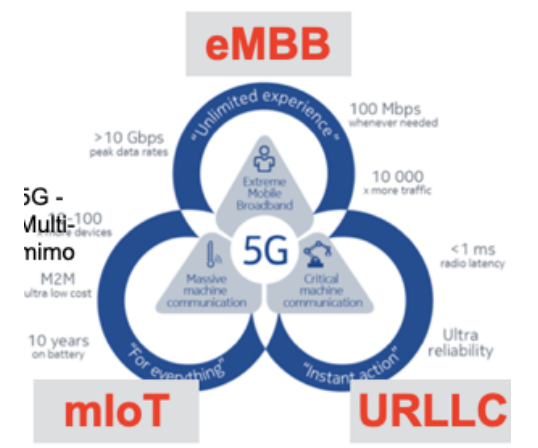
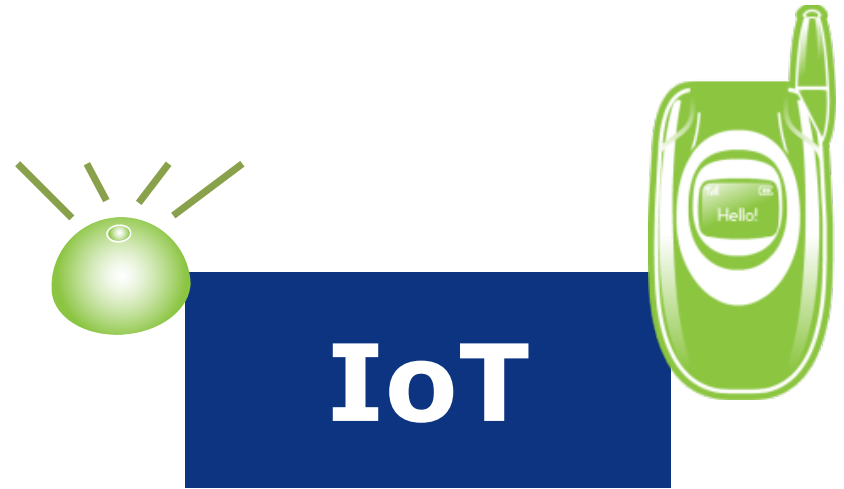
The role of Universities

“more toys for boys - or societal impact”

- Inclusive and empowered (digital) societies
- From NRENs to Schools and Communities
- Regional Competence Centres (RCCs) for
 - the Digital Transformation
 - Connect Schools & Communities
 - practical experiences



Digitalisation as Enabler



Digitalisation as enabler for Climate and Energy Justice

- Digitalisation as enabler
 - KISS: Keep it simple, stupid
 - Decentralised
 - Community Learning Living Labs (C3L)

- Renewable energy
 - micro-grid, decentralised
 - production <> consumption balance
 - empowerment for communities

- Self-sustained communities
 - Building blocks for job-creation, educating, energy
 - Values, Inclusivity, Resilience





Histories

“My mobile is more important than a weapon”
Head of Mbaash, TZ



Catherine R Kimambo connecting her first village
<https://vimeo.com/368147538> - 2020



Mount Kenya - our cultural heritage
Usingo Secondary School, KE

