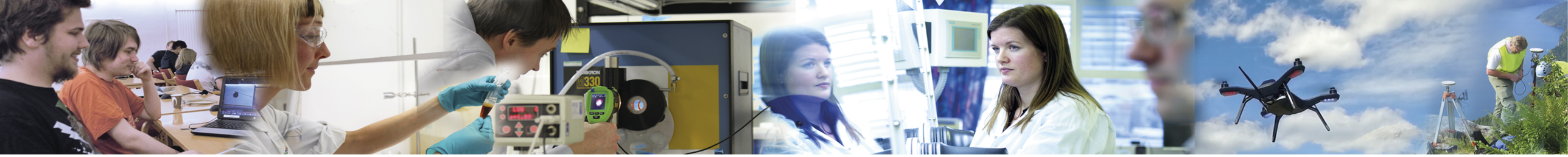


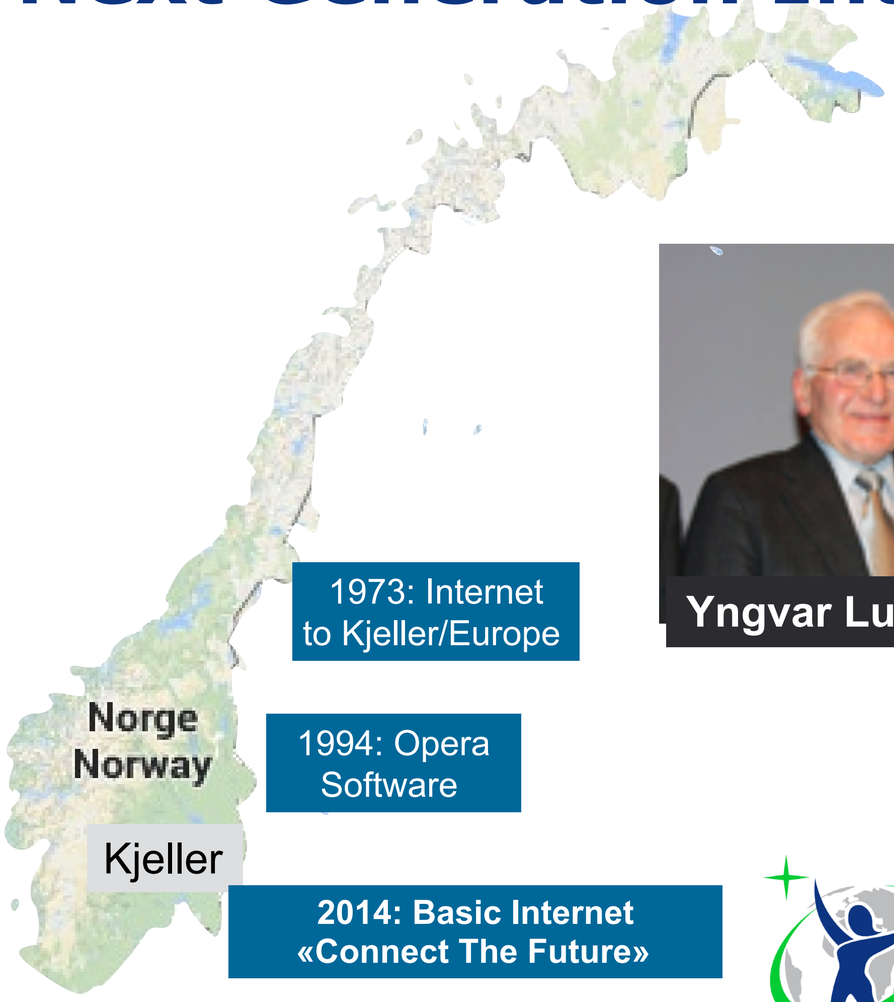
UiO : Department of Technology Systems
University of Oslo

## Digital Cooperation and Diplomacy, 25Oct2022

# Africa and the Internet

Josef Noll,
Professor, University of Oslo, Department of Technology Systems
Secretary General, Basic Internet Foundation
Kjeller, Norway, m: +47 9083 8066, e: josef@jnoll.net

# An inclusive Next Generation Internet



Norge
Norway

Kjeller

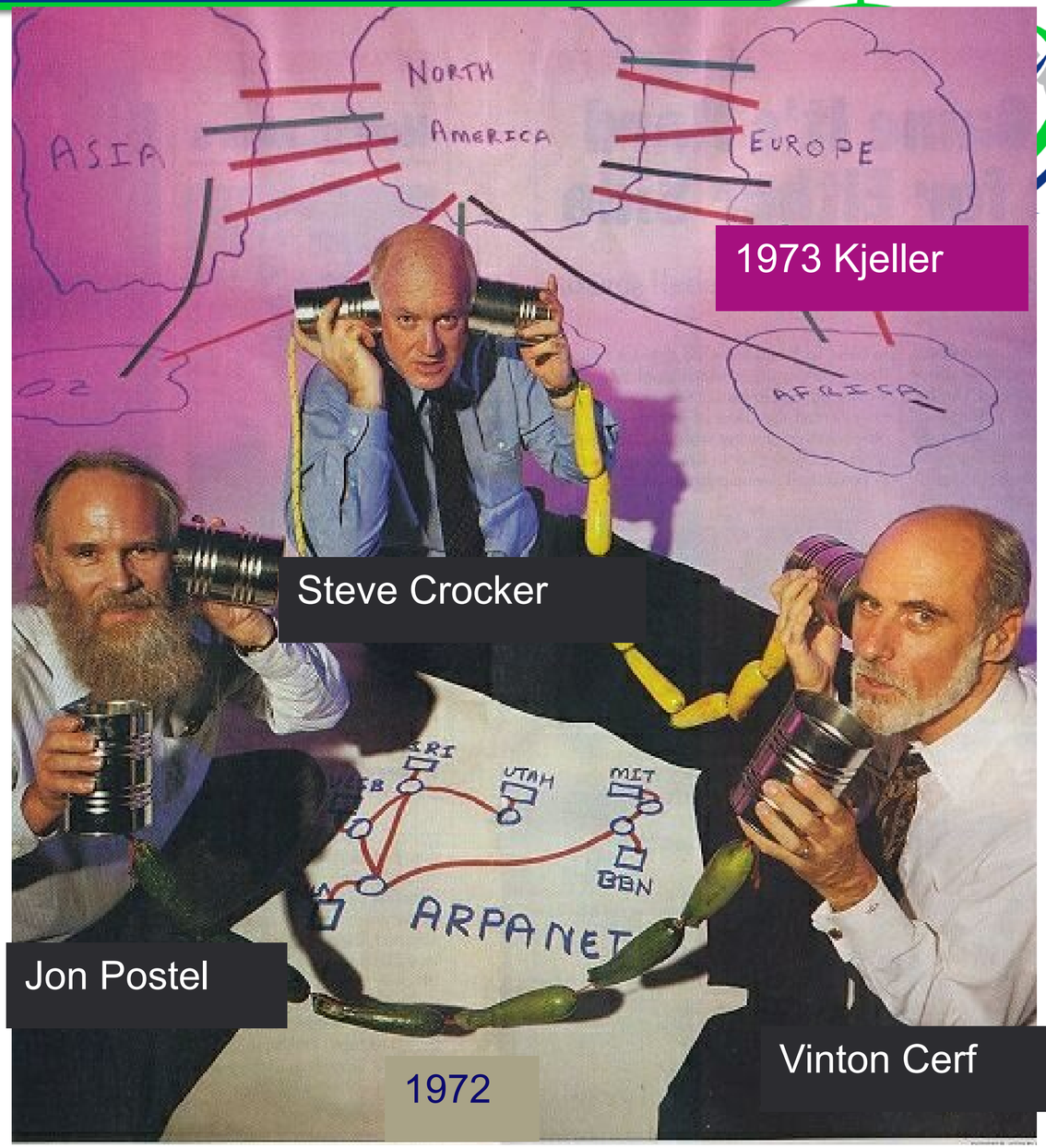
1973: Internet to Kjeller/Europe

1994: Opera Software

**2014: Basic Internet «Connect The Future»**

Yngvar Lundh

Pål Spilling




1973 Kjeller

Steve Crocker

Jon Postel

Vinton Cerf

1972

Source: http://www.michaelkaul.de/History/history.html

Mission

Framework Conditions

Partnerships

# Africa

https://www.mylifeelsewhere.com/country-size-comparison/tanzania/norway

# How can we “Connect The Future”?

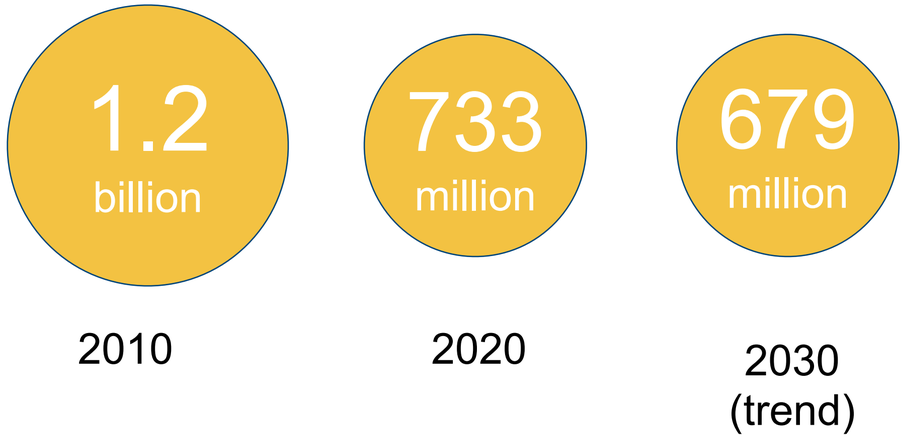
**Josef Noll** @josefnoll · Jun 2

Amazing opening by @ITU @ITUSecGen Houlin Zhao, setting the scene for connecting every single human by 2030, and @meilinfung, addressing the history of the Internet and #NRENs to connect schools. We're in @CateKimambo @RosalynnMworia @UcsafT @AheriNet @cisskisumu @WSISprocess

# Energy & Digital, enablers for the SDGs

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

People without electricity

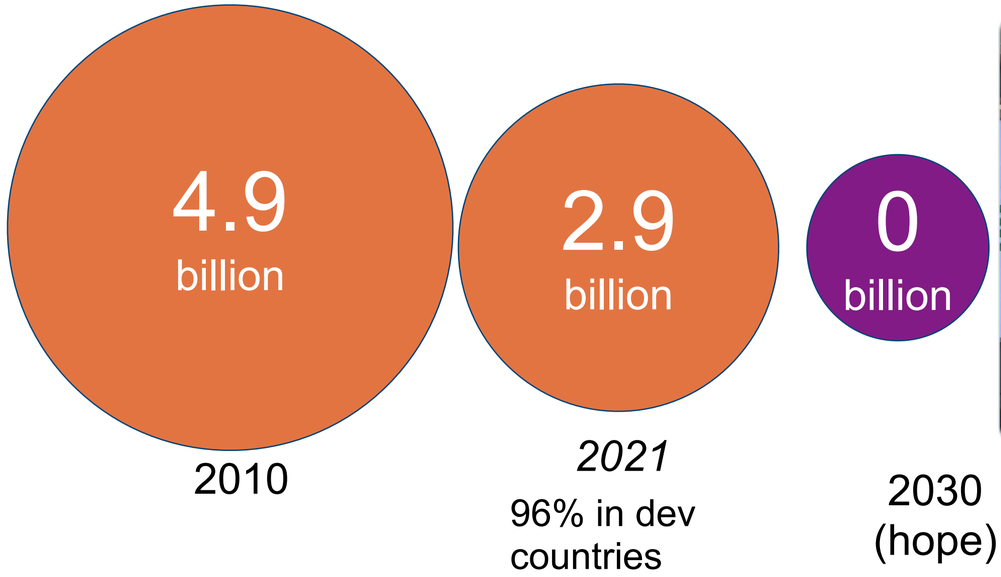



[WorldBank 2021]

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

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

People not using Internet

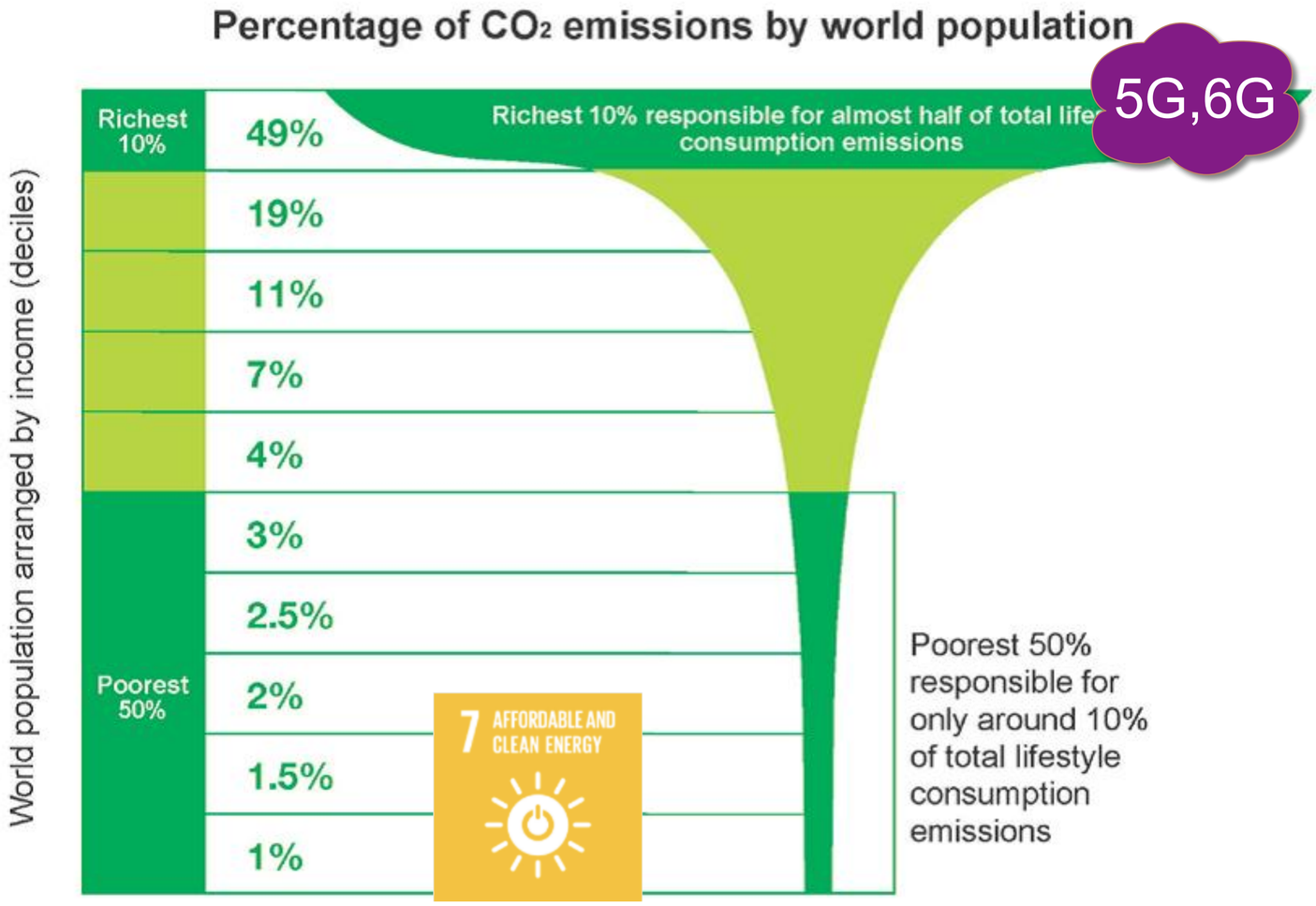


WSIS Forum 2022

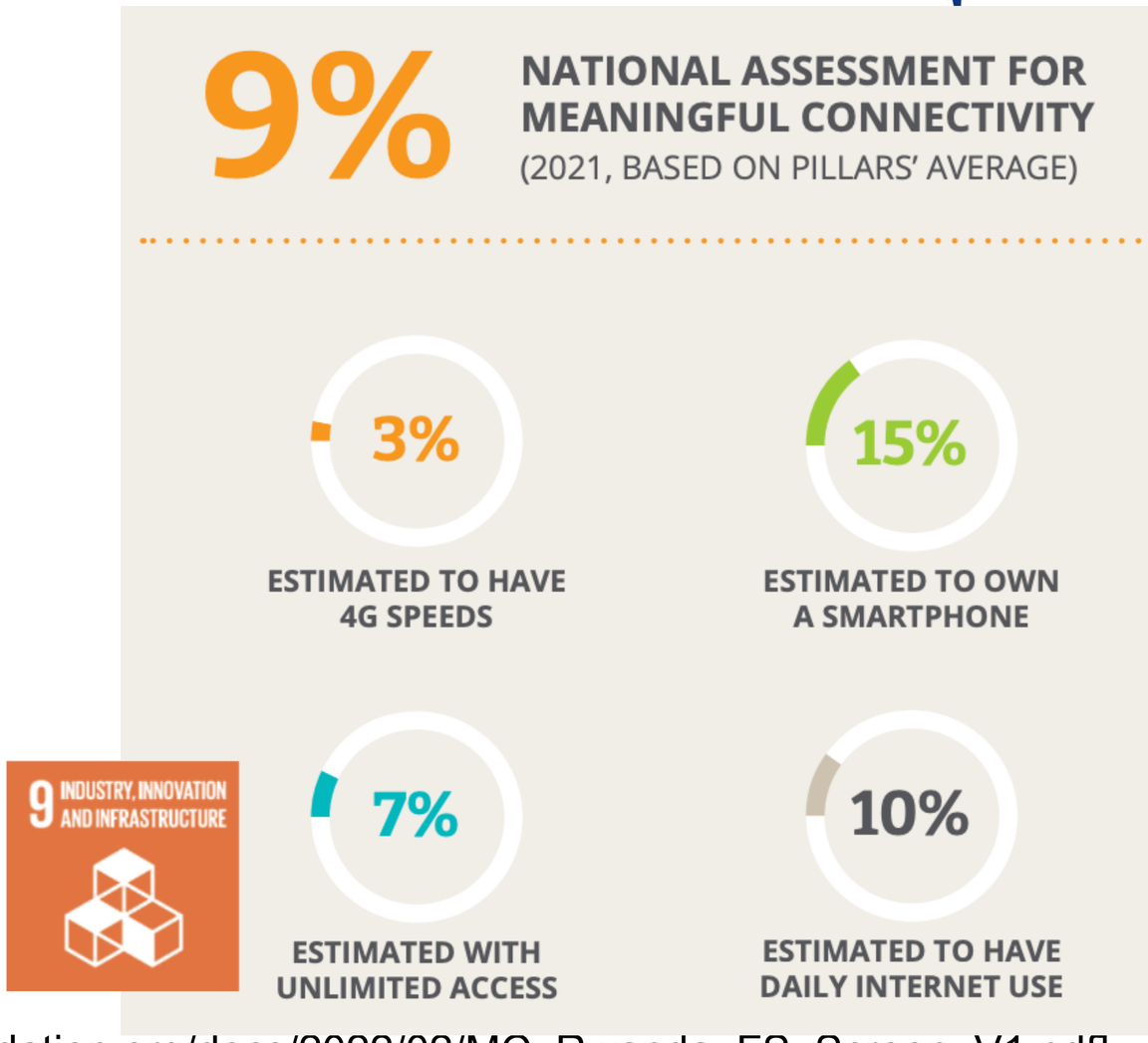
[ITU 2010, 2021]

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

# Inequality in Energy & Digital Access

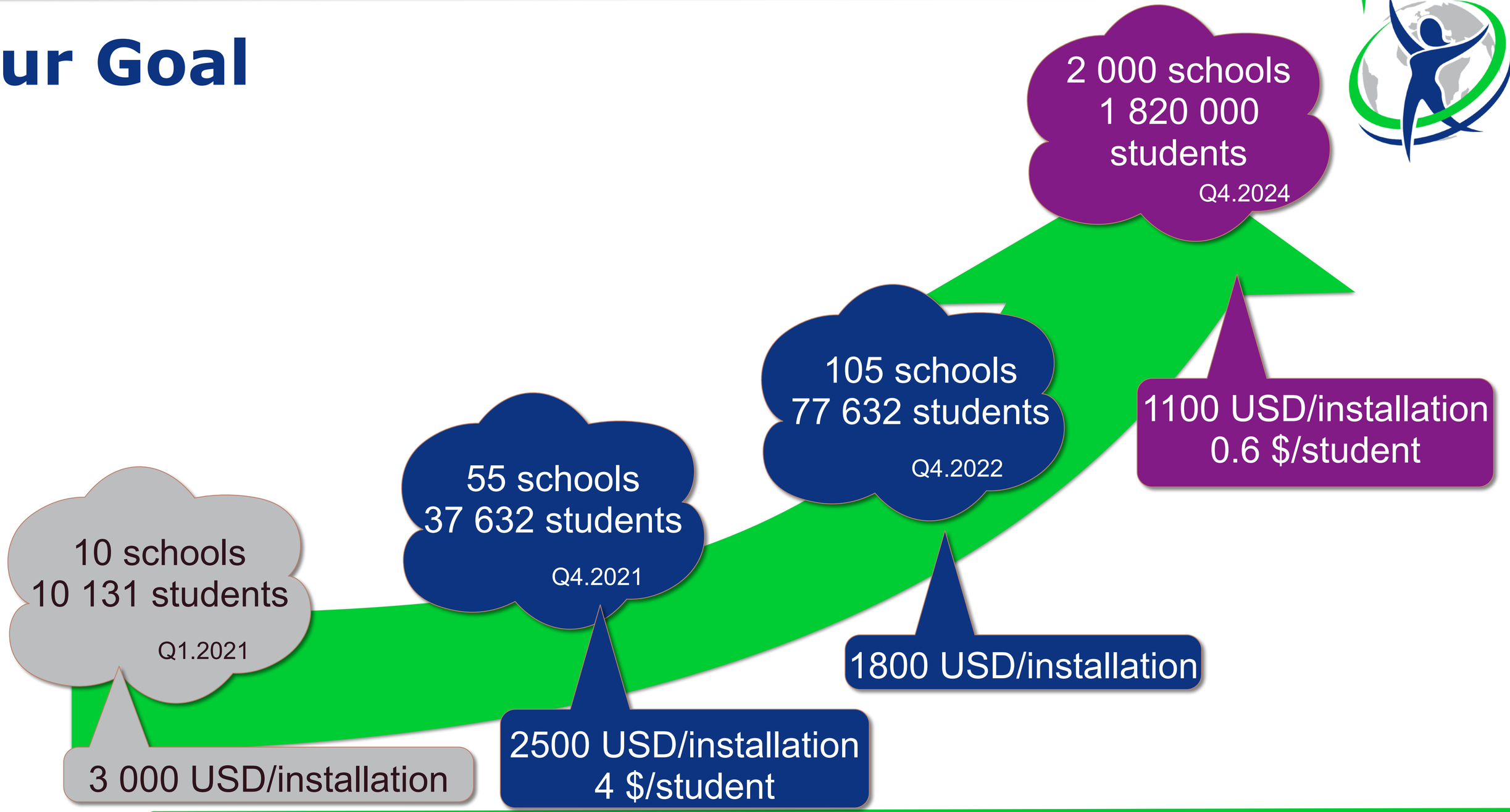



[Source: Oxfam.org, 2015]




[https://webfoundation.org/docs/2022/02/MC_Rwanda_FS_Screen_V1.pdf]

# Our Goal


10 schools
10 131 students
Q1.2021
3 000 USD/installation
55 schools
37 632 students
Q4.2021
2500 USD/installation
4 $/student
105 schools
77 632 students
Q4.2022
1800 USD/installation
2 000 schools
1 820 000 students
Q4.2024
1100 USD/installation
0.6 $/student

Mission

Framework Conditions

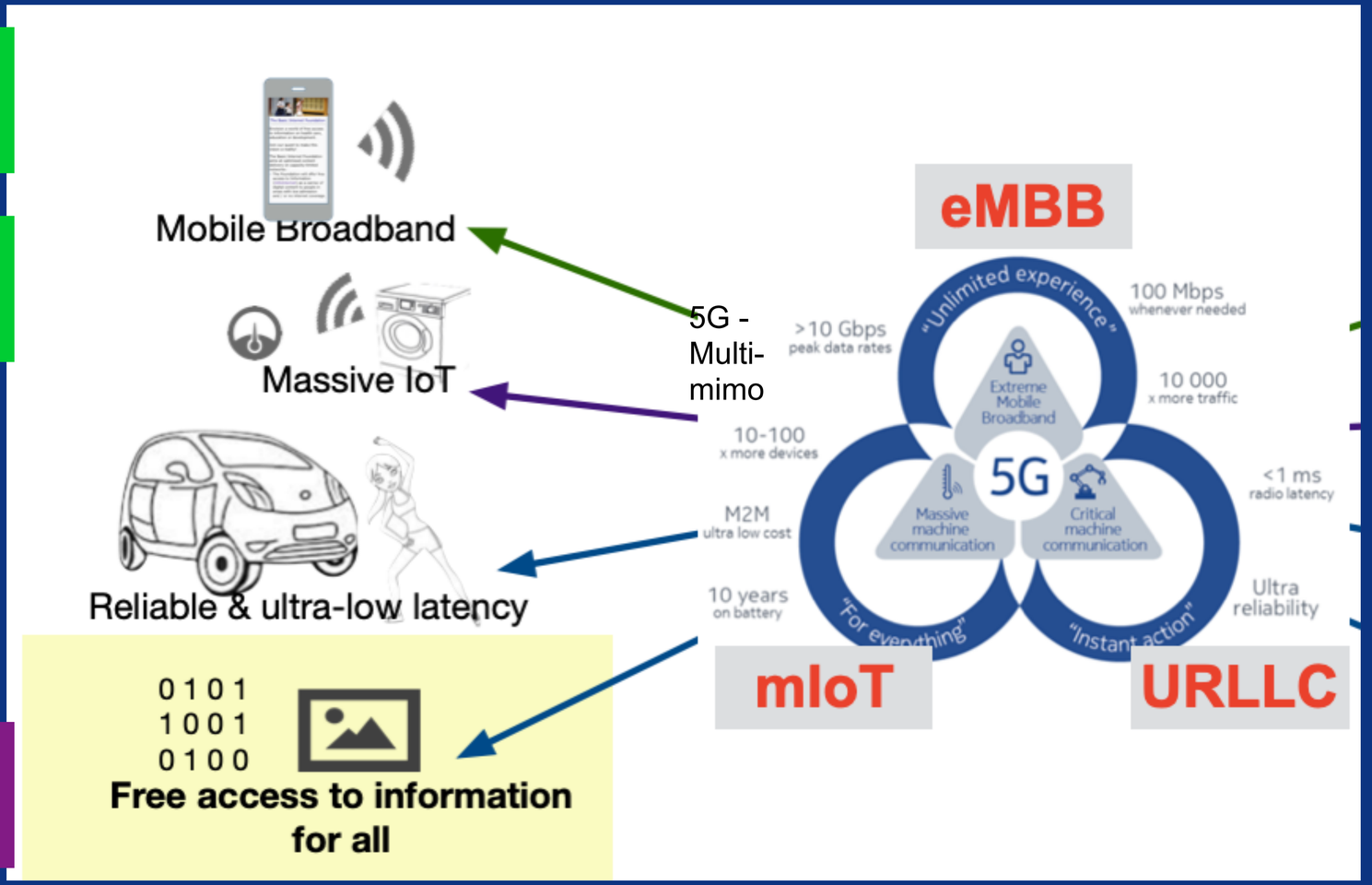
Partnerships

# Digitalisation (5G/6G)

**Road model: pedestrians & cyclists**

**Internet: text & pictures**

**Internet Lite**

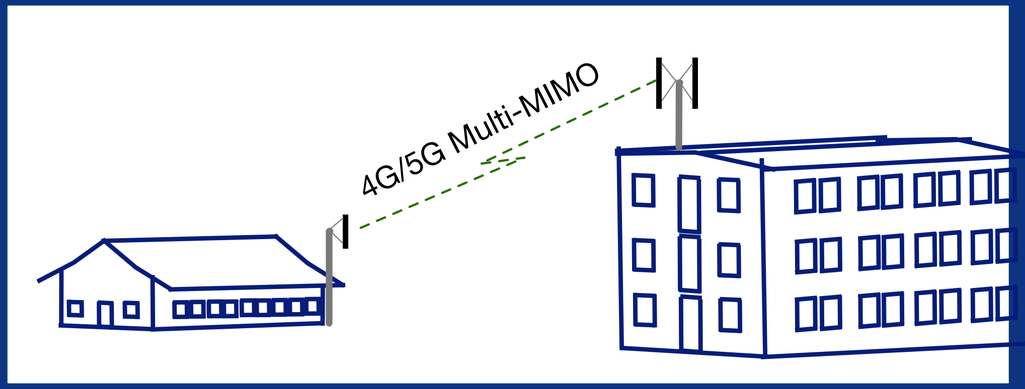


# AfricaConnect3 and the role of Universities

AfricaConnect3 project is co-funded by the European Union

The AfricaConnect3 project receives funding from the European Union under Grant Contract DCI-PANAF/2019/411-583.

- **Research for the (digital) Society**
- **Competence for the Digital Transformation**
- **Connect Schools & unconnected Communities practical experiences**
- **Real world search based on needs from the communities**



Live Transcription (Closed Captioning) has been enabled
Who can see
Talking: Caroline Stratton

# COVID-19 HAS LED TO THE FIRST RISE IN EXTREME POVERTY IN A GENERATION

AN ADDITIONAL **119-124 MILLION PEOPLE** WERE PUSHED BACK INTO **EXTREME POVERTY** IN **2020**

## THE PAN

IS LIKELY TO REVERSE PROGRESS
MADE IN REDUCING INCOME INEQUALITY
SINCE THE FINANCIAL CRISIS

COVID-19
**ESTIMATED TO INCREASE THE AVERAGE GINI**
FOR EMERGING MARKET AND DEVELOPING COUNTRIES
**BY 6%**

## COVID-19
## HAS WIPED OUT 20 YEARS OF EDUCATION GAINS

**AN ADDITIONAL 101 MILLION OR 9% OF CHILDREN**
IN GRADES 1 THROUGH 8 **FELL BELOW**
MINIMUM READING PROFICIENCY LEVELS IN 2020

The Sustainable Development Goals Report
**2021**

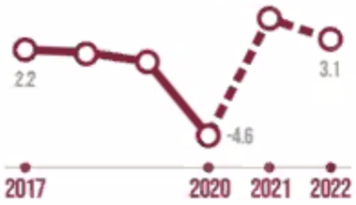
## THE PANDEMIC

HAS LED TO THE LOSS OF THE EQUIVALENT OF
**255 MILLION FULL-TIME JOBS**

ABOUT **4X** THE NUMBER LOST DURING
THE GLOBAL FINANCIAL CRISIS (2007-2009)

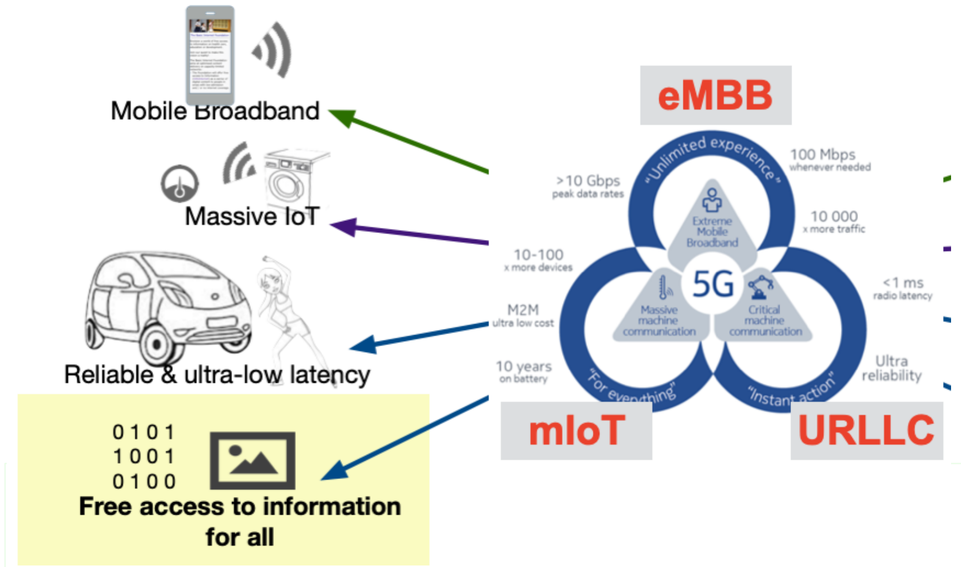
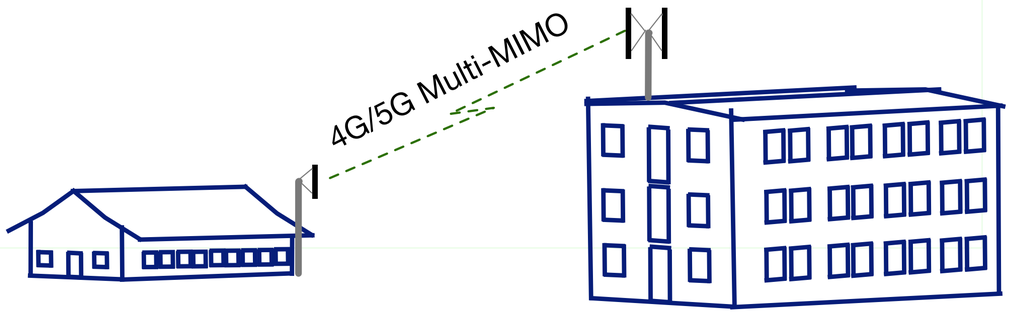
## ECONOMIC RECOVERY IS UNDER WAY

**GLOBAL REAL GDP PER CAPITA**
(2017-2022)




BUT FOR MANY COUNTRIES, ECONOMIC GROWTH IS EXPECTED TO RETURN TO PRE-PANDEMIC LEVELS ONLY IN **2022 OR 2023**

# Conclusion
# Partnership for Connectivity

2 000 schools
1 820 000 students
Q4.2024

- Universities
  - Real-world knowledge
  - Decentralised, empower the communities
  - Knowledge4Africa, 5GforPeople
- Community Networks
  - extension of NRENs?
- Commercial actors
  - Mobile operators: Research with 5G as backbone
  - ISPs, satellite
- Government, ITU, UNICEF, UNESCO, …
  - Framework conditions (spectrum, Internet Lite)