

23rd of February 2021 #CelticPropDay

How to recover the economy after covid-19

The role of 5G-6G

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President of AMETIC



Presentation

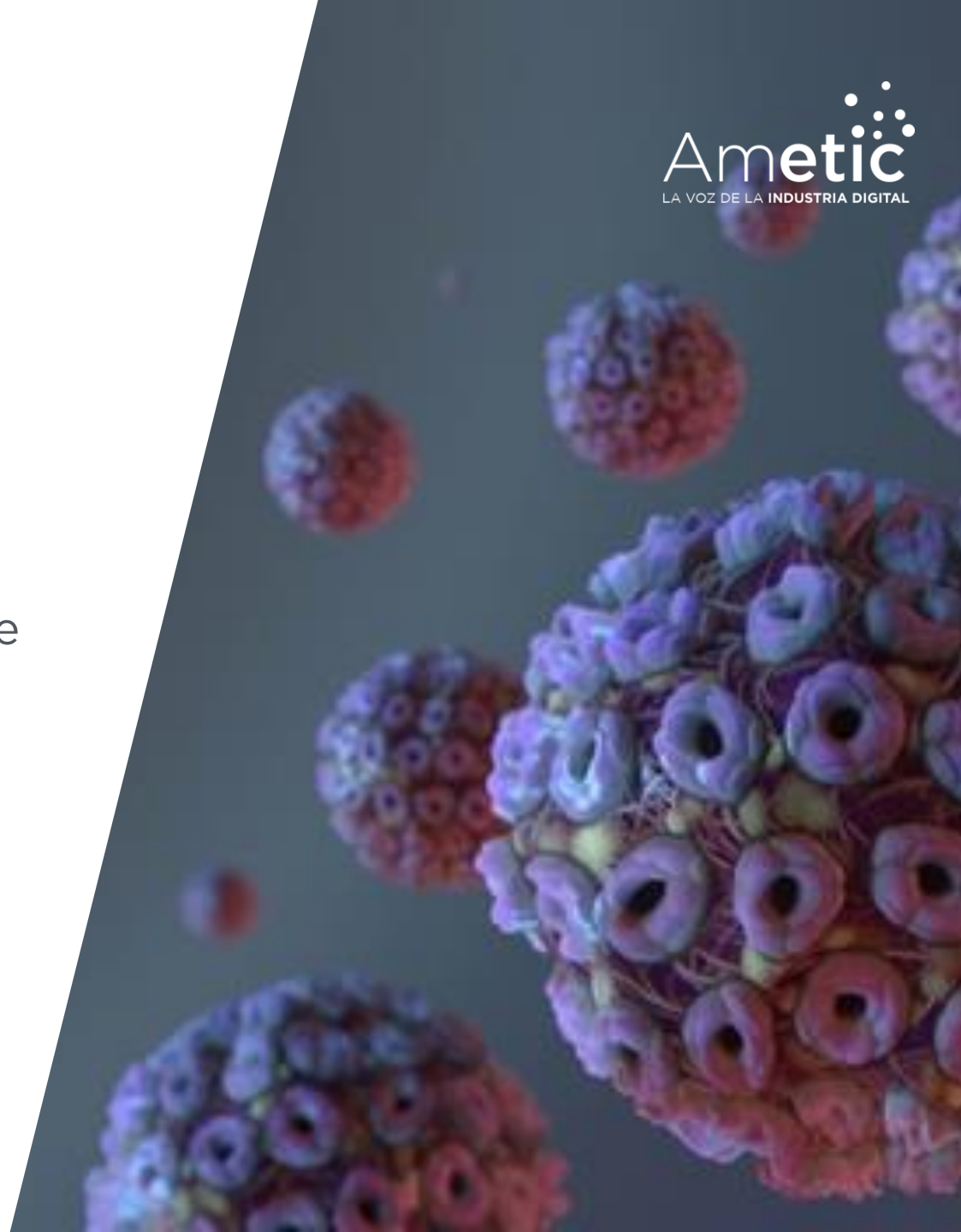
AMETIC is the association that represents the **digital industry in Spain**

The IT & Content sector generates
532.822 employees
115.154 million €
9,2% GDP 2019

(Source: ONTSI 2019)

The world after Covid-19:

- Will never be the same?
- Shall we take the challenge to really change our world?



Which will be the trends in our “post Covid-19 world”?

- Economy recovery or social recovery?
- How to fight against inequality, unemployment and lack of future for the new generations?
- What about sustainability?
- It's enough to recover or we need to transform?

Planet Positive Economy

- New trends examples: BCorp, Impact Investing, ESG (Environmental, Social and Corporate Governance), BlackRock, etc.
- Purpose as a claim of the new generations



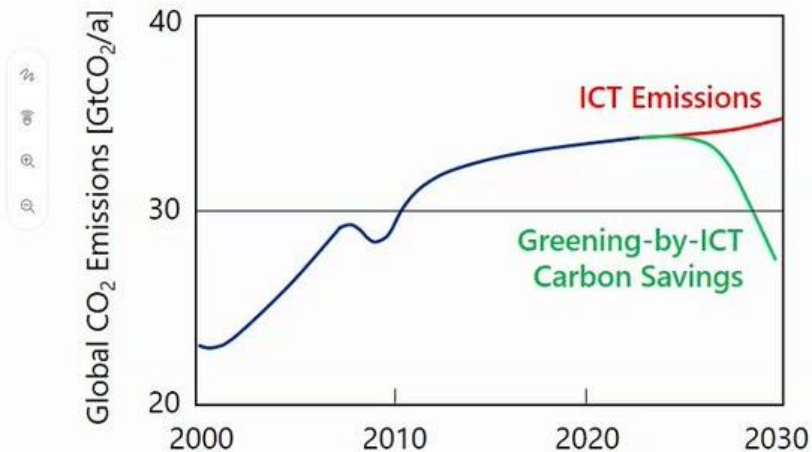
What about connectivity within this new scenario?

- New Social Trends (urban to rural, working from home, immigration, new geopolitical actors, demographic changes, pandemics, etc.)
- Shall 5G-6G help society to advance in the right direction?
- Which should be the drivers? (Ex. One Web)

What about Energy Consumption?

ICT is the key enabler to decarbonize our lifestyle

- Some of the positive *Greening-by-ICT* effects:
 - *Dematerialization* – less travel, less transport, ...
 - *Efficiency gains* – traffic, energy grids, buildings, ...
- Covid-19 made some of these pretty clear



| Global ICT-enabled CO ₂ Reduction 2030 | |
|---|---------------------|
| Sector | GtCO ₂ e |
| Manufacturing | 2.7 |
| Energy | 1.8 |
| Buildings | 2.0 |
| Mobility | 3.6 |
| Agriculture | 2.0 |
| Total global | 12.1 |
| Global ICT Emissions 2030 | 1.25 |
| Saving Factor | 9.7 |
| [GeSI Smarter2030] | |

ICT can massively enable decarbonization in *other* sectors

Source: Sustainable ICT systems for a green world

Keynote, CELTIC-NEXT Day
December 2, 2020

Dr. Klaus Grobe
Dir. Global Sustainability,
ADVA Optical Networking

Some questions...

- Will be the networks capable to adapt themselves to the new mobility and social living trends?
- Will be the spectrum a “*public asset*” or just a “*concession or a property*” for telecom operators?
- Shall telecom low orbit satellite constellations be a good solution for 100% territorial coverage?

Some new relevant technologies

- SDN, AI based networks, AR-VR, Edge Computing, LO Satellites, Quantum Communications...
- How will we manage to keep human development at the center?
- Will the foreseen mix between, physical, virtual and biological worlds be a help to human development?



A new opportunity for Europe?

Will 6G new generation telecommunications be a tool for achieving One Health (Human, Animal & Environmental)?

The slide is divided into several sections:

- One Health:** A Venn diagram with three overlapping circles: Human Health (blue), Animal Health (orange), and Environmental Health (green). It is surrounded by various fields of study including Public Health, Veterinary Medicine, Ecology, and Agriculture.
- Ecosystem Services:** A central yellow circular diagram with four quadrants representing different types of ecosystem services.
- Planetary Health:** A circular diagram with a central globe and multiple concentric rings representing different levels of planetary health and environmental indicators.
- Healthy people and communities ↔ Healthy animals and plants ↔ Healthy ecosystems and environment:** A triangular relationship diagram with double-headed arrows connecting the three nodes.
- Key Actions:**
 - Promoting One Health / Planetary Health
 - Promoting intersectorality
 - public health, animal health, environment, development
 - Sharing experiences in ecosystem health / public health
 - Community / stakeholder engagement
 - One Health and Ecosystem Health best practices

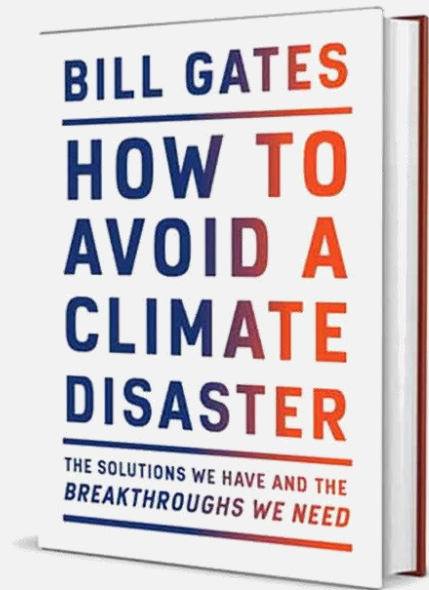
Source:
Simone Sommer

Directora del Instituto de Ecología Evolucionaria y de Conservación Genómica
UNIVERSIDAD DE ULM

Serge Morand

Director de investigación, ecólogo, CNRS y del CIRAD

The Bill Gates Warning



“Climate Disaster is the first priority for Mankind.
All the research and Innovation efforts should be directed to avoid it”



Bill Gates

Conclusions

- Avoid Climate Disaster should be a must in all innovation efforts
- Human beings should be at the center of any innovation goals
- One Health (People and Communities, Animals and Plants and Ecosystems and Environment) should be respected
- 5G and new generation 6G can help economy and social reconstruction and transformation, if these considerations are followed
- **Europe has an opportunity to be at the driving seat again**

Now, the floor is yours... good luck!

Thank you very much for your attention!