Halving global emissions by 2030 through exponential climate action and digital technologies

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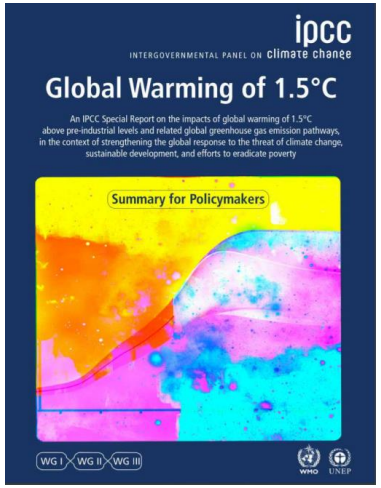
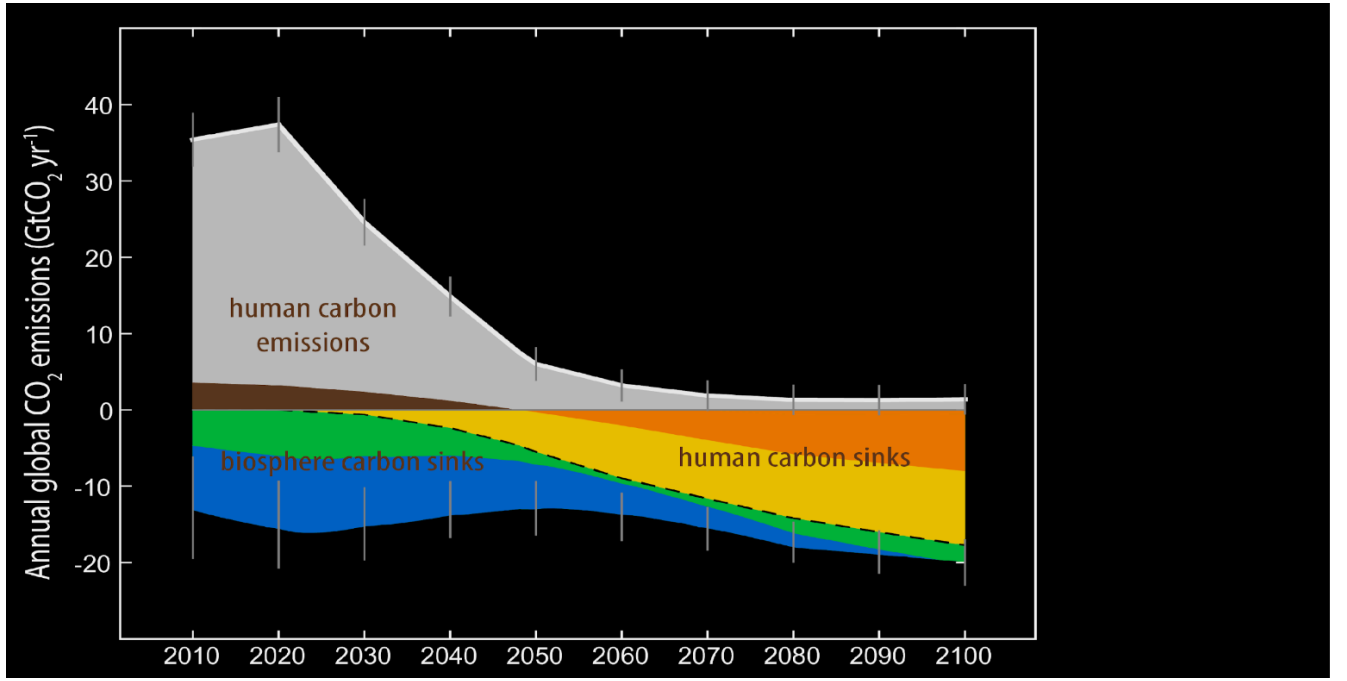
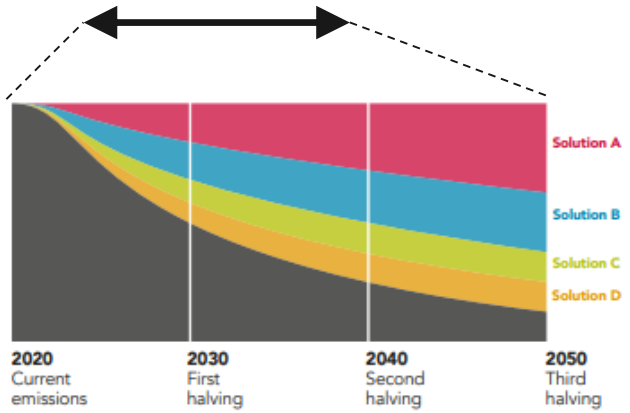
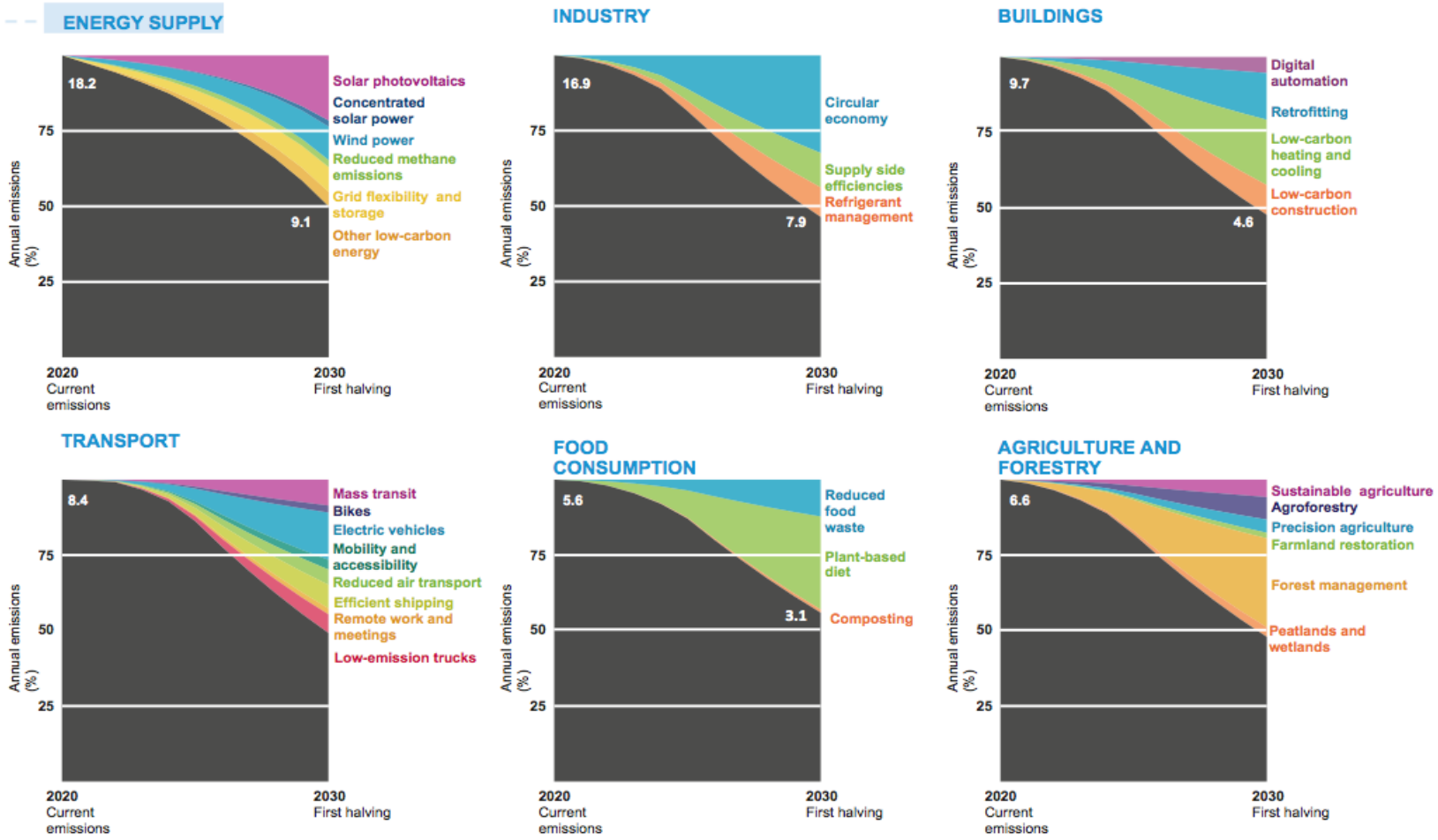
The mission: Halving global emissions by 2030

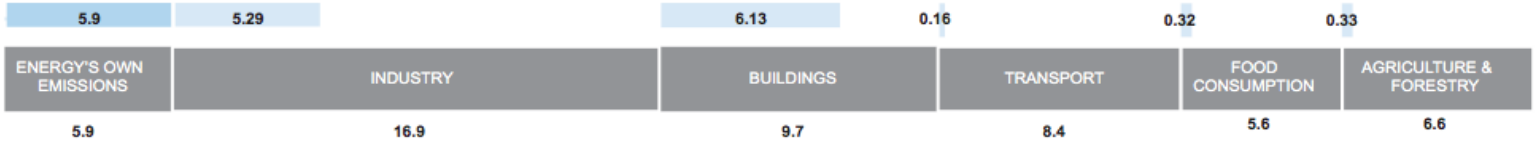






Trajectories for halving global GHG emissions by 2030

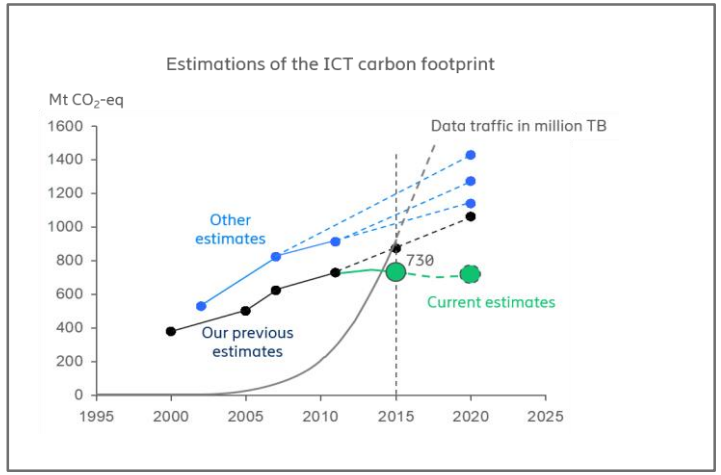




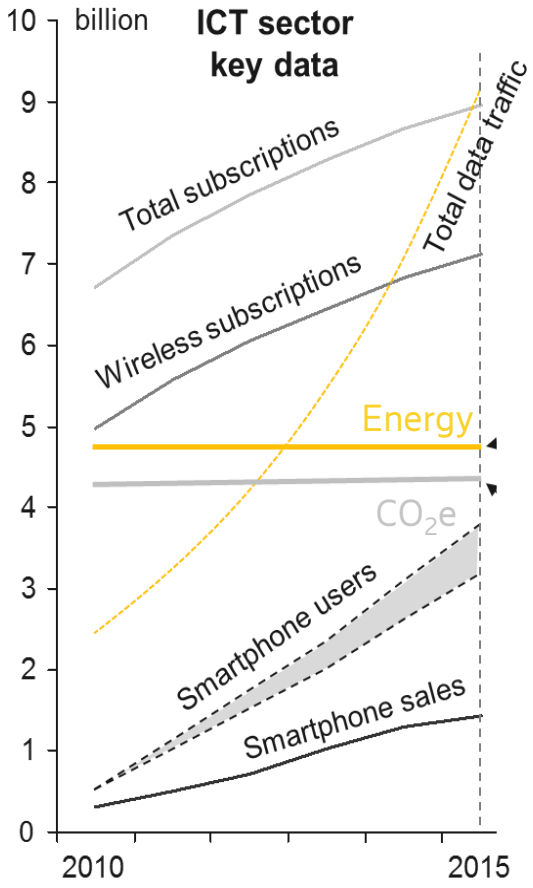
http://exponentialroadmap. org/

The global carbon footprint of the ICT sector

Predictions

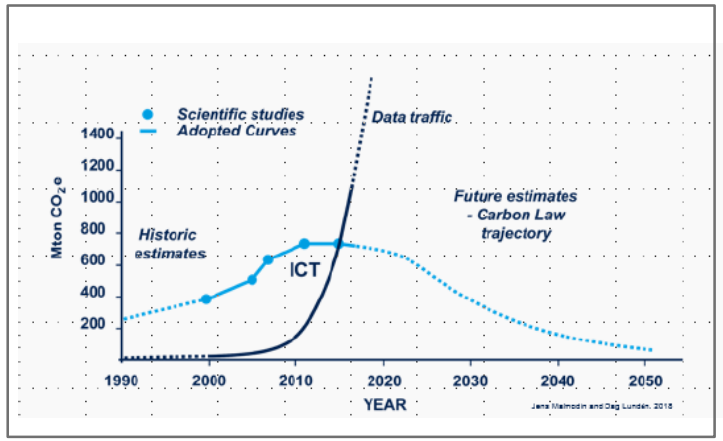


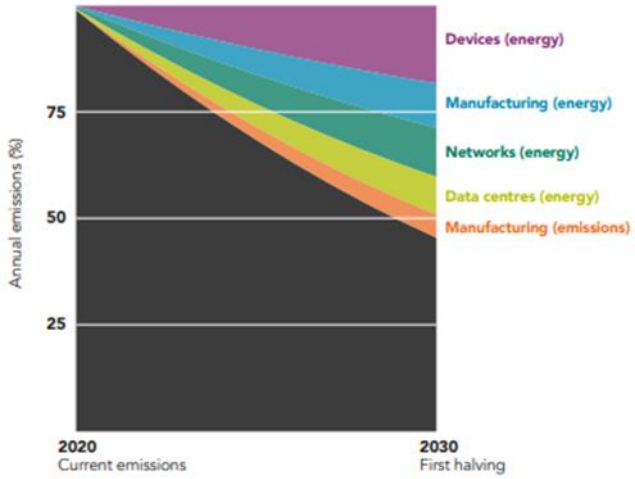
Outcome



Sources: ITU, Cisco, Gartner, IDC
To be published in the Journal of Sustainability article

Halving by 2030

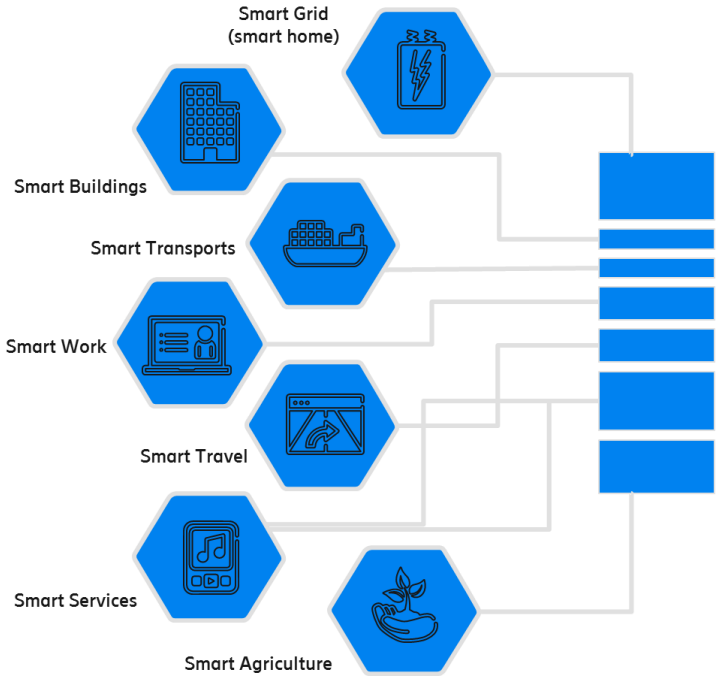


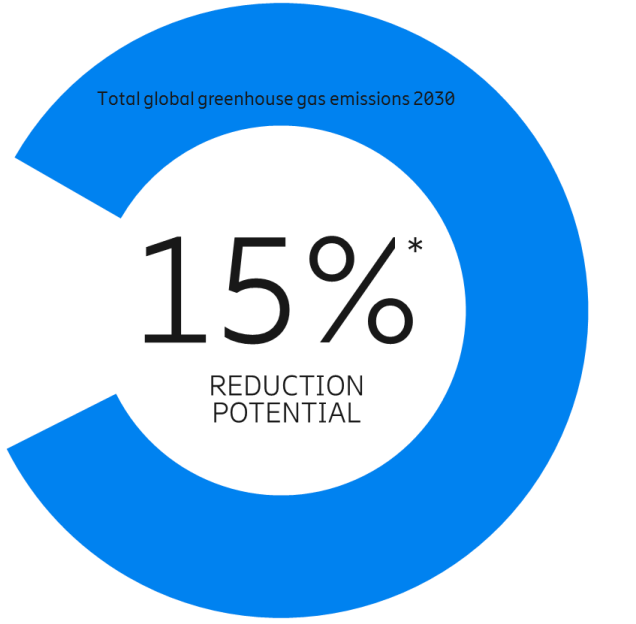


1,4% of GHG emission (full life cycle)
3,6% of electricity consumption (operation)

ICT as an enabler of exponential climate action

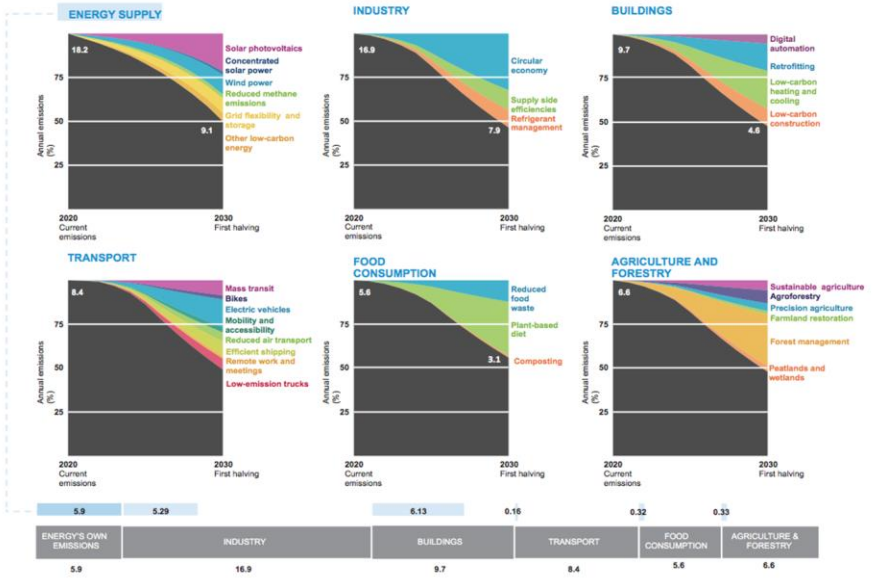
- ICT is the wildcard of decarbonization
- Can enable 1/3 of the first halving with current technologies
- Influences the decisions of 3 billion producers and consumers every day.
- Additional potential of 5G, AI, IoT and others to be explored

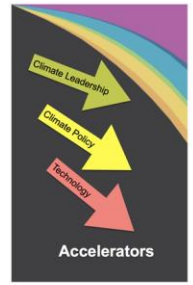




** Potential GHG reduction by 2030 due to ICT in a high reduction scenario. Note: 7% in a medium scenario.*

Trajectories for halving global GHG emissions by 2030





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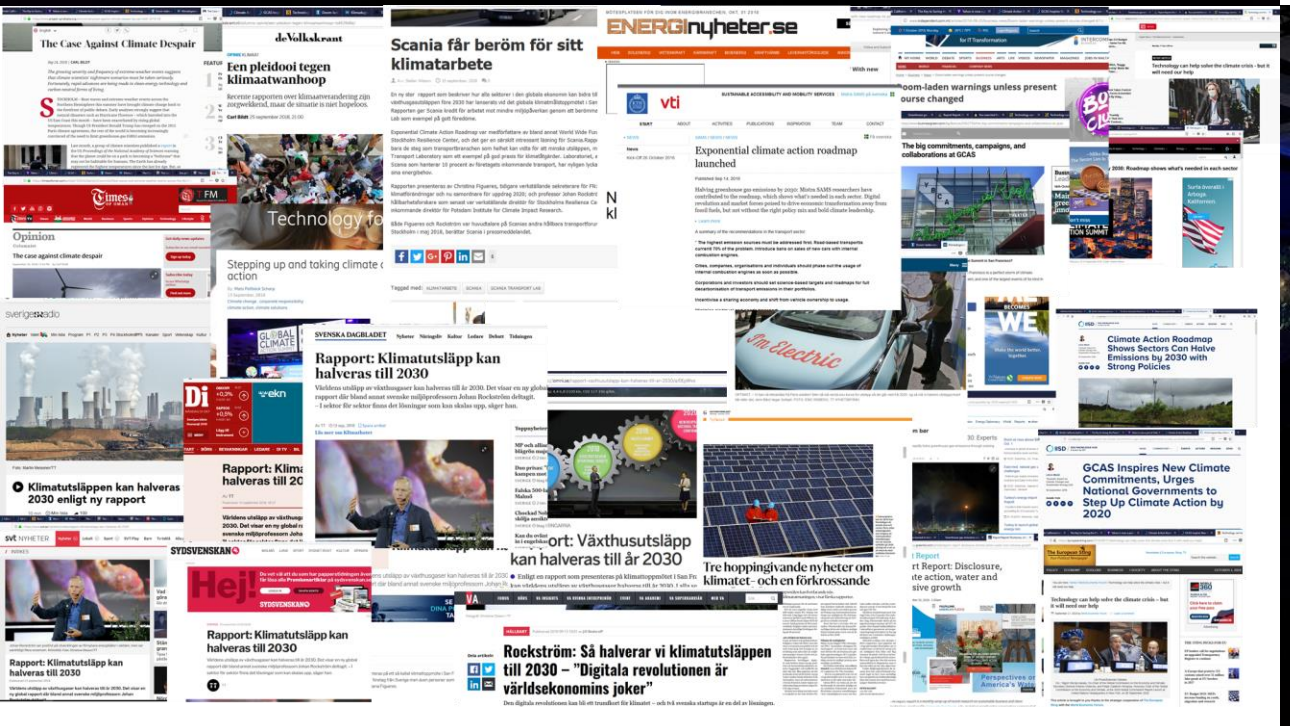

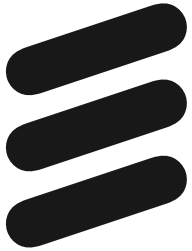

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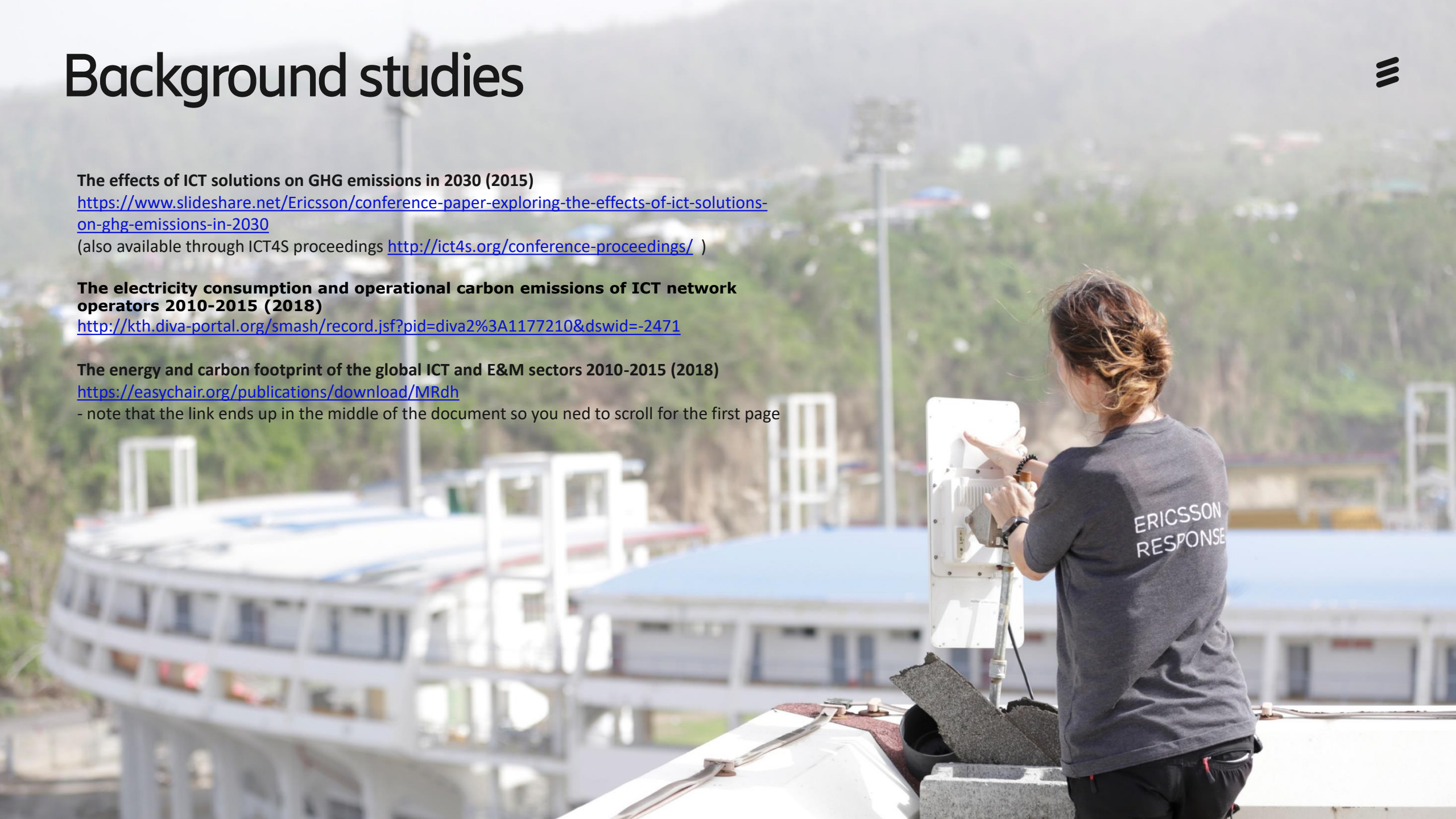
Background studies

The effects of ICT solutions on GHG emissions in 2030 (2015)
https://www.slideshare.net/Ericsson/conference-paper-exploring-the-effects-of-ict-solutions-on-ghg-emissions-in-2030
(also available through ICT4S proceedings http://ict4s.org/conference-proceedings/)

The electricity consumption and operational carbon emissions of ICT network operators 2010-2015 (2018)
http://kth.diva-portal.org/smash/record.jsf?pid=diva2%3A1177210&dswid=-2471

The energy and carbon footprint of the global ICT and E&M sectors 2010-2015 (2018)
https://easychair.org/publications/download/MRdh
- note that the link ends up in the middle of the document so you ned to scroll for the first page