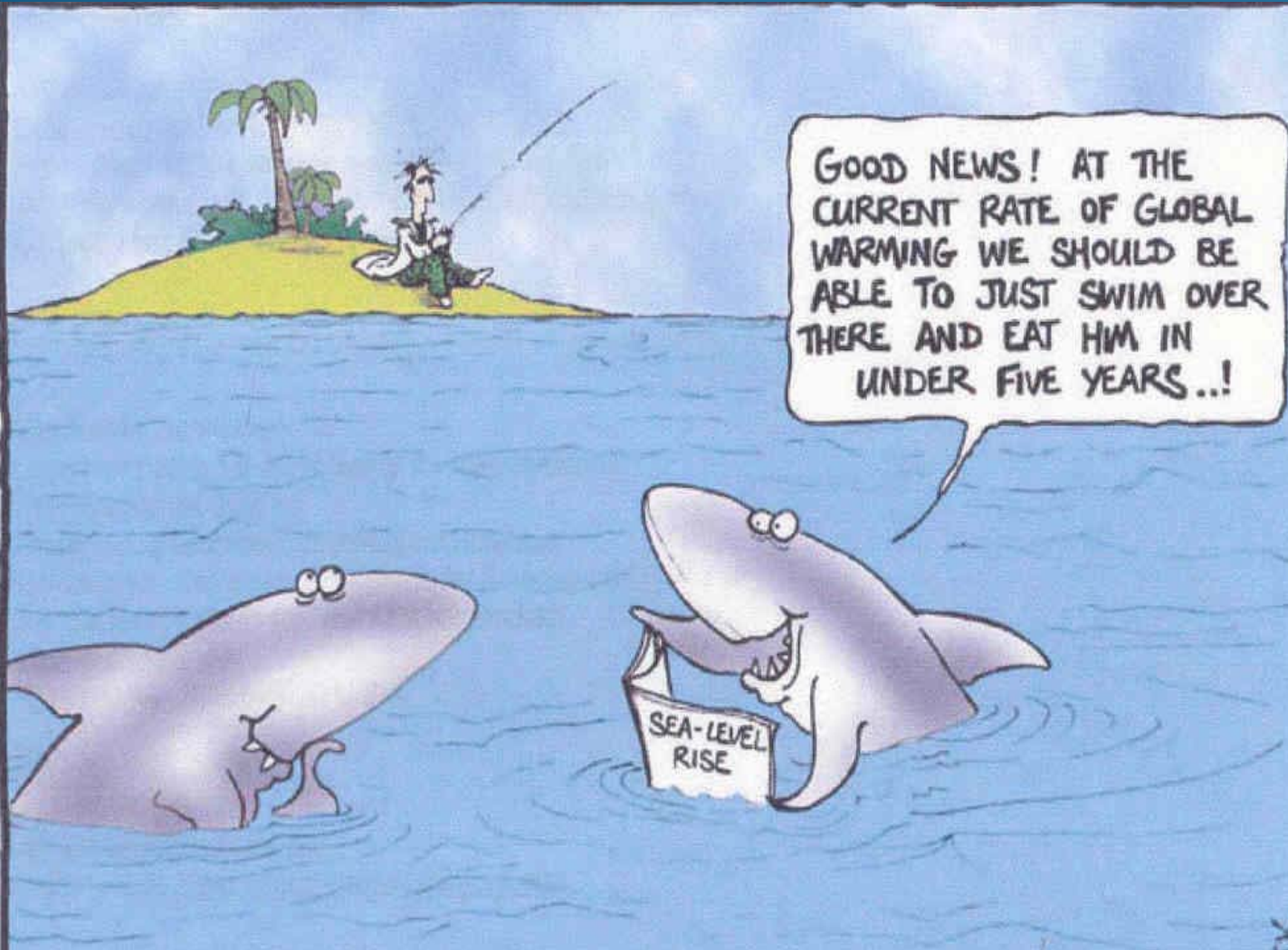


Broadband and Climate Change

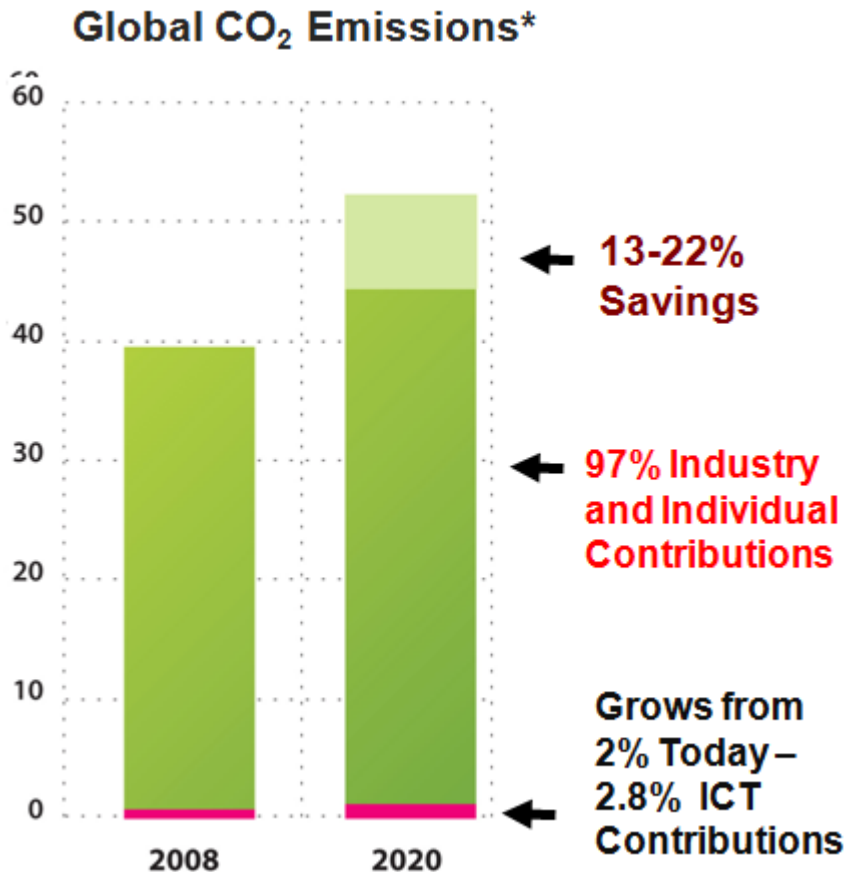
The need for speed...



Presented by
Chris Walker

FCC
Washington DC
August 25, 2009

ICT can enable big CO2 reduction in the U.S.



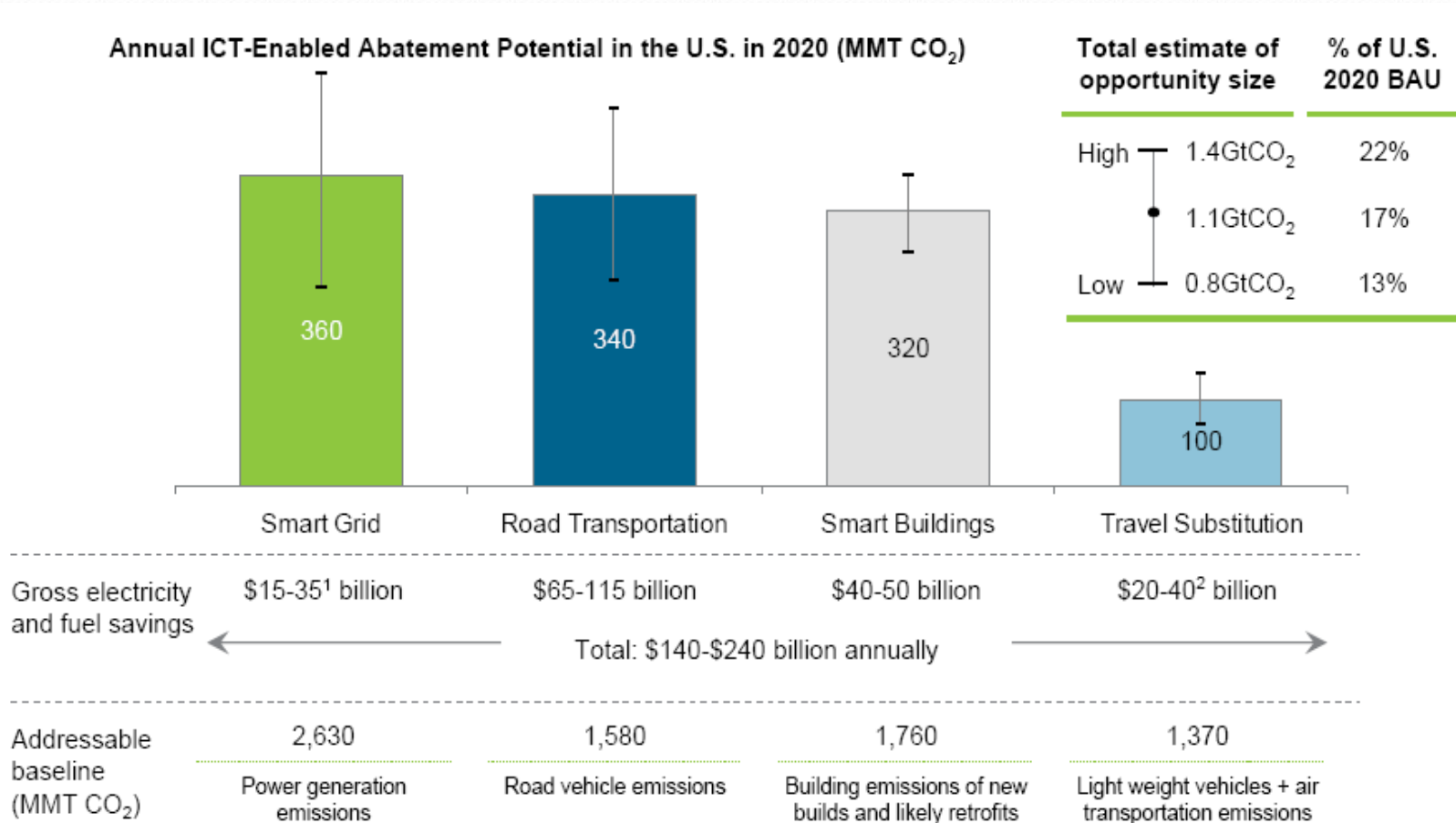
What we know:

- Broadband can play a greater role in facilitating energy-efficiency
- We need public policies for:
 - Timely, accelerated and greater deployment
 - National “smart” electrical grid
 - Improved energy efficiency in commercial buildings
 - Measurement - mechanisms in place to demonstrate the impact

Focus on ICT's direct footprint is important, however, ICT-enabled opportunities are ~6x bigger than ICT's own footprint in 2020

ICT-enabled solutions a huge opportunity in the U.S.

CO2 reduction potential 0.8-1.4GtCO2 and gross energy savings \$140-240 billion



1. Gross savings due to integrating renewable energy not included in SMART 2020 global analysis and left out of U.S. analysis as well. Renewable energy is a direct substitute, not an energy efficiency savings. Gross savings do not consider required investments to implement the opportunities. 2. Only jet fuel savings was included in the analysis for business travel substitution
 Source: EIA; EPA; DOE; NAIOP; NETL, EPRI; SMART 2020; Expert Interviews; EITCA; BCG Analysis; SMART 2020 United States Addendum Report

Government support needed to accelerate adoption

Use targeted policies to accelerate adoption and address specific technical, economic and behavioral challenges

Targeted policies

Principles for effective government policies

Smart Grid

Road Transport

Smart Buildings

Travel Substitution

Create an enabling regulatory framework

- Aim for consistent legislation that supports market-based solutions

Enable development of solutions

- Conduct fundamental research benefiting all stakeholders
- Encourage innovation, not specific technologies
- Encourage investment in required infrastructure

Support the business case when necessary

- Create the right incentives
- Ensure that markets create desired environmental and social outcome

Encourage positive behavior change

- Lead by example and support pilot projects
- Facilitate and coordinate the sharing of information