

*High-level OECD Conference
ICTs, THE ENVIRONMENT AND CLIMATE CHANGE
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Rapporteurs' findings

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www.oecd.org/sti/ict/green-ict

98%: ICTs as enabling infrastructure for green transformation across sectors

- Direct applications of ICT to resource reduction and management
 - Smartgrid
 - Intelligent transportation systems: mass transit, electric vehicles (smart charging)
 - Intelligent buildings and homes
 - Telework, Telemedicine, TeleEducation
 - Consumer behavior change: from home to highway

...but smarter does not by itself mean greener and requires significant capital investments: technology innovation must be accompanied by policy and incentives

...inconsistency in metrics, tools, targets, definitions is major impediment to meaningful corporate/civic responsibility

ICT for greener urban growth

- **Cities are important part of global problem.**
 - 75% of human produced CO2 is directly or indirectly from cities.
 - Cities have always been agents for change
 - Pilot projects/living laboratories are fueling innovation
- **Critical theme: How can ICT influence behavior.**
 - Presentation of information has significant impact on their response.
 - Begin with measurement at the scale at which an individual acts (home dashboard)
 - From collective intelligence to collective action
 - Keep in mind conflicts: who owns data, role of govt/private sector, incentives for sustainable sustainability.

Fostering cycle of sustainable consumption and use for and with ICT

Many opportunities and challenges for ICT to support sustainable consumption market: attend to full product roadmap

- **Product design:** foster sustainable product design so that there is a choice to be made--standby devices use 10% of household consumption in France!
- **Consumer choice:** standardized and readable (eco)labeling for busy people to make green choices at time and place of purchase
- **Consumer use:** personalized home and travel dashboards
- **Product re-use:** foster re-use before recycling, and support recycling with ICT and incentives: product roadmaps

X-factor: ICTs in natural resource management

- **Sensors, software, networks to reliably measure and model GHGs and ecosystem health in natural environments**
 - Capture and process real-time data with affordable and reliable monitoring: remote and local sensing, mobile phones as sensors
 - Verification of deforestation interventions and carbon pricing systems
 - Modeling/data/simulations to inform policy
- **...but, Integration and coordination** needed in both research and policy
 - Climate change experts do not work with energy saving experts, air pollution treated in isolation from water pollution, etc.
 - Policy coordination across different government bodies / silos (ministries, agencies) and at the international level

The role of ICTs is not well appreciated in environment/climate change ministries, COP15 community

... leading to underinvestment