



Proposals for ITU-T Standardization activities on ICTs and Climate Change



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I Presented in Kyoto

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% of CO2 emission

emit

30
mTN

68
mTN

reduce

=> CO2 Calculation

In 2012 ICTs will contribute to reduction of 38 (= 68-30) million tons of CO2 in ICT and broadcasting sectors, which is equivalent to 3% of CO2 emission in 1990 in Japan.



Easy BUT

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Who believes the calculation?

Why?

- **Is the Method valid?**
- **Even so, is it common to other countries?**
- **Even so, is it acceptable for other sectors?**

YES, we DO need Standard for the Method!



Messages from Kyoto (1)

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- ❑ **ITU** should take the **initiatives** that may be required **for energy-saving systems and applications** where there is a requirement for standardization and development of ITU Recommendations.

- ❑ **ITU** should also work on the **standardization** of methodologies for the analysis, evaluation and quantification of the **GHG reduction** that may **be achieved through the use of ICTs**.



Messages from Kyoto (2)

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- ❑ **ITU-T** should establish a **Focus Group**, open to members and non-members of ITU, which can be an appropriate place to discuss the role of ITU-T toward **reduction in GHG emissions** to be achieved through implementation of ICTs.
- ❑ **TSB** encourages the participants to submit their proposals on **terms of reference (ToR)** for this group as well as the initial proposals on methodologies to be adopted.



Proposed Scopes of Focus Group

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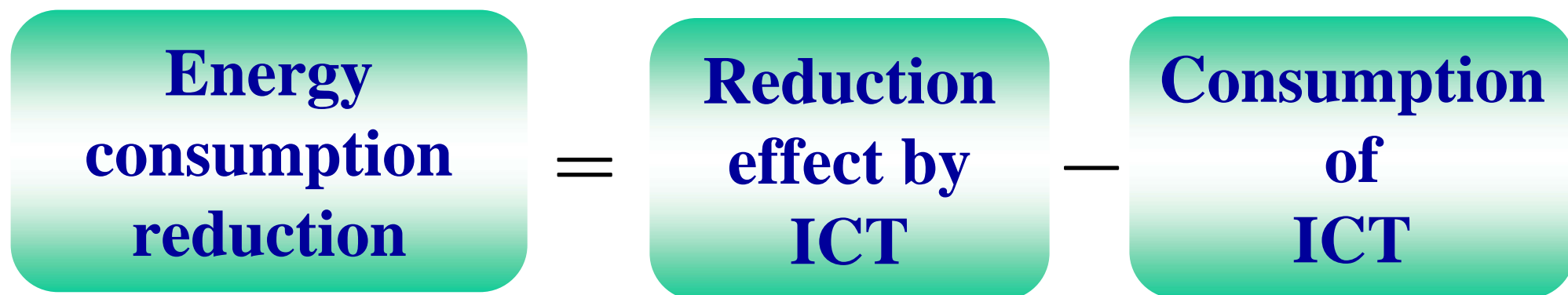
- ❑ internationally agreed **common methodology** for measuring the following impacts of ICTs on climate change :
 - **direct impacts** on ICT systems and services
 - => **Power reduction methods**
 - **indirect impacts** through application of ICTs to various social and economic sectors
 - => **CO2 saving calculation methods**



Proposed Methodology

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- **Energy consumption reduction** through the use of ICTs is defined **as the difference** between the energy consumption **reduction effect** of utilizing ICTs and **energy consumption** of ICTs.





Example of Trial Calculation

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Face to Face Meetings vs. Video Conference

- Between Tokyo and Yokohama (< 30km)
- Once a week (48 times/year), One hour meeting
- **Two** people **travel by train** in case of face to face

Life Cycle Assessment

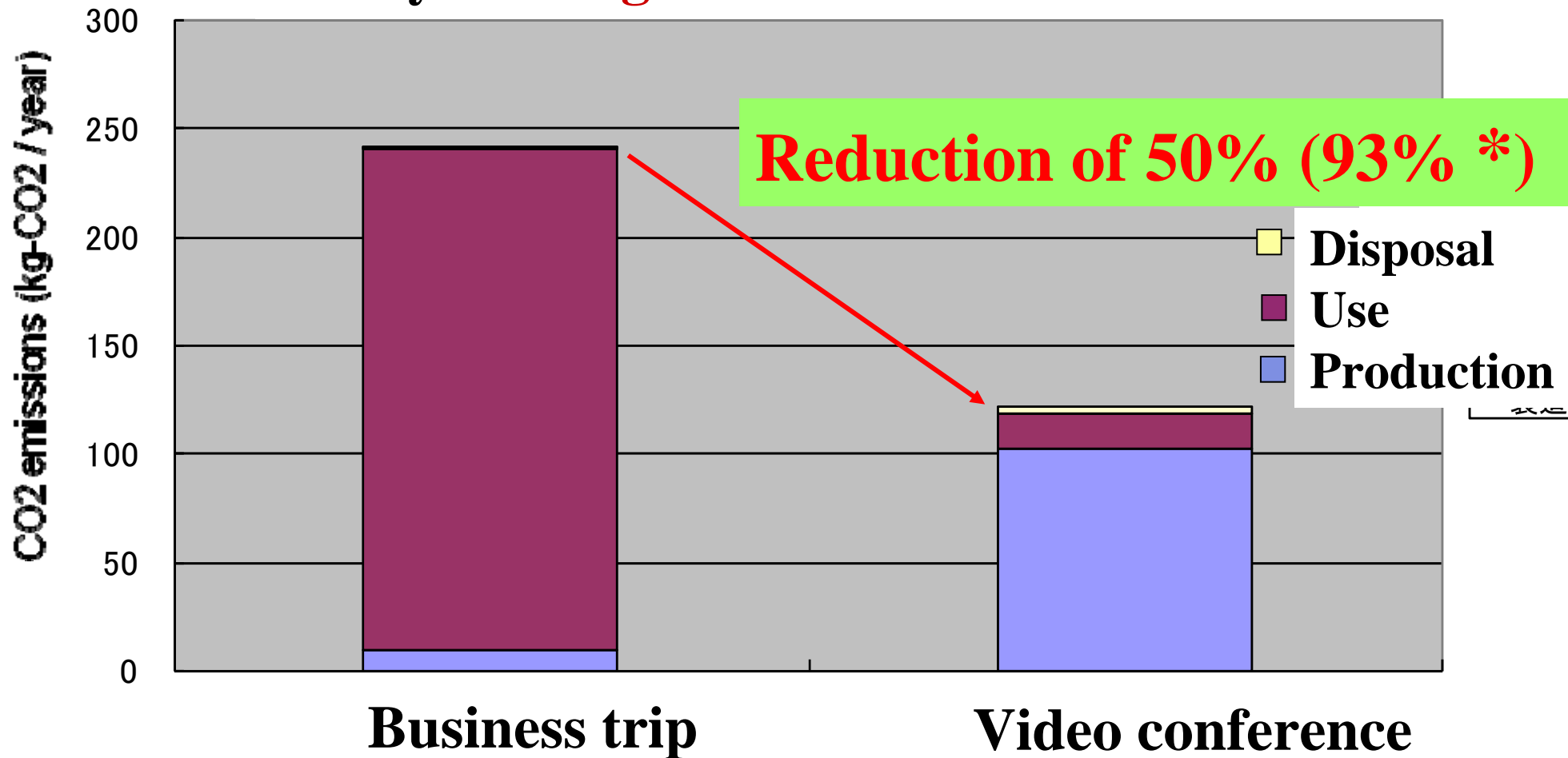
CO₂ emissions and their reduction significantly vary depending on video conference devices and conditions such as frequency of use and distance between each office.



Example of Trial Calculation

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* only the **stage of use** taken into account.





Subjects of Focus Group

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- ❑ **Definition** of energy consumption **saved** through **ICT utilization**
- ❑ **General principle/approach** to determine the **quantity** of energy consumption **saved** through **ICT utilization**,
- ❑ **Calculation methodology** of energy consumption **saved** through **ICT utilization**,
- ❑ **General principle/approach** to **audit the calculation** of energy consumption **saved** through **ICT utilization**



Start of Focus Group

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- ❑ **TSAG** is expected to establish the Focus Group (FG) on ICTs and Climate Change **at its July 2008 meeting**.
- ❑ **The FG** will start its discussion as soon as possible (probably **early in fall this year**).
- ❑ **TSAG** should decide an appropriate **new structure & working methods** for further studies on ICTs & Climate Change within ITU-T soon **after** the outcomes from the **FG** become available.



Thank you for your attention !





References

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- 1. ITU/MIC Kyoto Symposium on ICTs and Climate Change - Chairman's report**
(www.itu.int/ITU-T/worksem/climatechange/index.html)
- 2. ITU/MIC Kyoto Symposium on ICTs and Climate Change - Meeting Summary**
(www.itu.int/ITU-T/worksem/climatechange/index.html)
- 3. ITU-T Recommendation A.7 "Focus Group: Working methods and procedures"**