



## Recommendation of the Council on Information and Communication Technologies and the Environment

8 April 2010 - C(2010)61



### THE COUNCIL

**HAVING REGARD** to Article 5 b) of the Convention on the Organisation for Economic Co-operation and Development of 14 December 1960;

**HAVING REGARD** to the Seoul Declaration for the Future of the Internet Economy [C(2008)99], the Recommendation of the Council on Resource Productivity [C(2008)40], the Recommendation of the Council for Enhanced Access and More Effective Use of Public Sector Information [C(2008)36], the Recommendation of the Council on Improving the Environmental Performance of Public Procurement [C(2002)3], and the Recommendation of the Council on Environmental Information [C(98)67];

**HAVING REGARD** to the OECD aim to build a “stronger, cleaner, fairer world economy”, and the need to strengthen efforts to pursue green growth strategies as outlined in the Ministerial Declaration on Green Growth, which considered that “international co-operation will be crucial in areas such as the ... application of green ICT for raising energy efficiency” and recognised “that special efforts need to be made at the international level for co-operation on developing clean technology, including by reinforcing green ICT activities” [C/MIN(2009)5/ADD1/FINAL];

**CONSIDERING** that better use of information and communication technologies (ICTs) is a major factor in improving environmental performance and addressing climate change and that they have key roles in increasing energy efficiency, managing scarce resources, combating climate change, and tackling other environmental challenges including protection of biodiversity, directly, in other sectors, or by underpinning systemic behavioural change;

**AIMING** to support national efforts to establish, improve and review policies on ICTs and the environment;

**RECOGNISING** that this Recommendation focuses on government policy and environmental performance, including policies to increase public awareness, change consumer behaviour and improve business performance.

### On the proposal of the Committee for Information, Computer and Communications Policy:

**I. RECOMMENDS** that, in establishing or reviewing their policies for information and communication technologies and the environment, Members take due account of and implement the following principles, which provide a general framework for enhancing the contribution of information and communication technologies to improving environmental performance:

#### Co-ordinating ICT, Climate, Environment and Energy Policies

1. Members should coordinate ICT policies and climate, environment and energy policies to improve environmental performance, tackle climate change, enhance energy efficiency and improve sustainable resource management. They should aim to bridge the gap between ICT, climate, environment and energy experts, policy makers and stakeholders and extend understanding among these groups of: i) the direct effects of ICTs themselves on the environment, ii) the enabling effects of ICT applications in other sectors, and iii) the systemic effects to change social and cultural

behaviour through the use of ICTs.

### **Adopting Life Cycle Perspectives**

2. Members should encourage the adoption of life cycle perspectives in ICT and ICT-enabled applications for sustainable management of natural resources and materials in production, use and end-of-life phases. They should, to the extent possible, promote coherent environment-friendly and sustainable R&D, design, production, use and disposal of ICTs, and extend their working life wherever environmentally efficient. Members should also encourage the development of methodologies and indicators to measure and monitor impacts over the life cycles of ICT goods and services and “smart” ICT-enabled applications in buildings, transport and energy systems, including developing baseline measures of embedded and actual green-house gas emissions.

### **Supporting Research and Innovation in Green Technologies and Services**

3. Members should support long-term basic research, and where possible stimulate research and development in resource-efficient ICTs and “smart” applications for example through technology-neutral tax incentives or carbon offset mechanisms, and encourage user-driven innovation. They should encourage development of ICT applications for measuring and monitoring environmental challenges and promote co-operation and knowledge exchange between ICT and non-ICT firms, research institutions, governments, and other stakeholders. Finally they should use flagship demonstration projects to diffuse promising “smart” ICT-enabled applications.

### **Developing Green ICT Skills**

4. Members should promote green ICT related education, training and skill development to meet demand for environmental skills and expertise at all levels and in all industries. They should also encourage interdisciplinary co-operation in developing green ICT education and training.

### **Increasing Public Awareness of the Role of ICTs in Improving Environmental Performance**

5. Members should increase public and consumer awareness of environmental implications of using ICTs and their potential to improve environmental performance. They should promote widespread development and adoption of clear standards and eco-labels based on life cycle approaches to production, use and disposal of ICT goods and ICT-enabled applications. This includes spreading awareness of the direct effects of ICTs, enabling effects of ICT applications in buildings, transport and energy, and the potential of ICTs to have systemic effects on social and cultural behaviour.

### **Encouraging Best Practices**

6. Members should encourage the wide sharing of best practices to maximise the diffusion of green ICTs and “smart” ICT-enabled applications in the public and private sector, including governments, businesses, civil society and regional and international organisations. They should exchange information and good practices on how to ensure data protection, security and privacy in “smart” ICT-enabled applications. They should themselves share good practices in measuring economic and social environmental impacts of ICTs and ICT-enabled applications. Finally, they should use these principles to review and collect information on national policies and initiatives and exchange information on policy development.

### **Governments Leading by Example**

7. Members should minimise the environmental impact of ICTs in public administration through green ICT approaches, applications and services. To the extent possible, they should maximise resource efficiency of public facilities by using “smart” ICT applications in lighting, heating and cooling, and building control, including enhancing process efficiency and organisational change in public administration through teleworking and videoconferencing to reduce commuting and

travelling. They should also minimise ICT-related disposal through reduce, reuse, and recycle policies.

### **Improving Public Procurement**

8. Members should take greater account of environmental criteria in public procurement of ICT goods and services and increasing environmental innovation among suppliers. This includes providing an appropriate policy framework that incorporates environmental price and performance criteria in public procurement, where it is economic to do so, including total life cycle costs of ICT goods and services, and providing information, training and technical assistance to officials in the ICT public procurement and use chain.

### **Encouraging Measurement**

9. Members should encourage development of comparable measures of the environmental impacts of ICT goods and services and ICT-enabled applications and among similar products. They should also increase understanding of the effects of government policies (information, incentives, regulations) on improving measurement tools and increasing public awareness.

### **Setting Policy Targets and Increasing Evaluation**

10. Members should set transparent policy objectives and targets to measure and improve government green ICT strategies, including ICT-enabled applications across the economy. They should monitor compliance with policies on a regular basis to set clear responsibilities and improve accountability. Where appropriate, they should apply voluntary approaches where self-monitoring and self-reporting can be effective and where tough but achievable voluntary targets can be met. Finally, they should encourage the adoption of appropriate national legislation that sets the ground for implementation of green ICT strategies.

## **II. INVITES:**

1. Members to disseminate this Recommendation throughout the public and private sectors, including governments, businesses, civil society and other international and regional organisations to encourage all relevant participants to take the necessary steps to better harness information and communication technologies to tackle environmental challenges and to improve the environmental performance of information and communication technologies;

2. Non-members to adhere to this Recommendation and collaborate with Members in its implementation.

**III. INSTRUCTS** the Committee for Information, Computer and Communications Policy to promote the implementation of this Recommendation and review such implementation after three years, and as required subsequently, to enhance the positive effects of information and communication technologies on the environment.