

# for a living planet®



# FROM RISK TO PROFIT THE ICT SECTOR AS A WINNER IN A LOW CARBON ECONOMY

# From risk to profit

# The ICT sector as a winner in a low carbon economy

#### **Background**

For a long time, discussions about the climate have focused almost exclusively on problems and risks within companies. NGOs have mainly focused on companies responsible for the highest emissions. The media, in turn, have linked the climate issue to the traditional power and transportation sectors and politicians have focused most of their energies on legislation intended to deal with the laggards and incentives resulting in incremental reductions in carbon emissions.

As society must provide better services with much lower carbon emissions than today TODAY, the ICT sector is probably the best suited to embrace a perspective that will turn the current climate challenge into a business opportunity. While it is important to look at risks and problems, such a focus has up to now resulted in a situation where companies have not seen environmental questions as part of core business. The environment has been dealt with as a separate issue and handled either by the Environment Health and Safety departments (EHS), in order to mitigate risks and ensure compliance, or by PR/communication departments, in order to deal with criticism or highlight achievements by the company.

Given today's need for significant reductions in  $\mathrm{CO}_2$  emissions (in developed countries around 30 percent by 2020 and 90 percent by 2050), this previously reactive approach is not enough. Instead, a proactive approach is needed. This requires leadership and new thinking. Companies today need to be able to actively seek and create opportunities that the transition to a low carbon economy creates in order to ensure that they can increase their revenues – not only reduce costs – making climate change a driver for innovation and profit.

In order to achieve this, it is necessary that such leadership from companies is endorsed from the top. CEOs and senior management teams in the ICT sector need to ensure that their business models encourage solutions that help reduce CO<sub>2</sub> emissions. A low carbon perspective should be adopted in everything from R&D and product development to lobbying and sales strategies.

ICT solutions which are already readily available will become even more attractive on the market when seen from a low carbon perspective, allowing the ICT sector to step up as leaders, as well as shifting the negative outlook on climate change by the business community towards seeing tomorrow's business opportunity. For example, many meetings can be more cost-efficient by using a new generation of videoconferencing rather than flying. Many workplaces can increase productivity. By collaborating with construction companies and city planners, a whole new set of solutions can become reality – from control of lighting and heating to planning of transportation and decentralised high-tech production.

#### Objective

To produce a white paper that explores opportunities for the ICT sector to take the lead in the transition towards a low carbon economy. The paper will be based on concrete case studies within the ICT sector, where companies provide ICT solutions that help customers reduce their carbon footprint (solutions would include video conferencing, flexible-working solutions, energy-intelligent buildings, etc.). The paper will also assess existing and future revenue streams for energy-efficient/energy-saving ICT applications.

# How can ICT companies tap into new revenue streams and become winners in a low carbon economy?

As society starts to move towards becoming more resource-efficient, new opportunities will emerge. During this transition, we can expect that new revenue streams will be available. Increased oil processes, stronger focus

## What is a low carbon economy?

A low-carbon economy is a future economy in which carbon dioxide emissions from the use of carbon based fuels (coal, oil and gas) are significantly reduced.

Such an economy is being envisaged by many states and organisations as a long-term necessity in order to mitigate the effects of global warming. It might also be hastened by future oil shortages and the associated increases in energy prices that are predicted

to come, coupled with anticipated increases in energy demand as countries such as China and India continue their industrialisation.

The most important part of a low-carbon economy is the use of energy conservation measures. While the substitution of renewable energy sources for fossil fuels is important, it is only with new systems, such as intelligent housing, city planning and new transportation/communication solutions, that we will be able to make the necessary emission reductions.

on energy security, combined with an increased set of policies to address climate change will all affect investments and purchasing patterns. An estimate by Booz Allen Hamilton suggests that over the next 25 years, modernising and expanding water, electricity, and transportation systems of the world's cities will require approximately \$40 trillion (possibly more). This number shows that there is a significant amount of money available for such investments and it is an estimate that the WWF will use to assess future potential revenue streams.

# Why shift the focus from risk to opportunity?

While it is important to manage risks, it is not enough to move a company into a position where it can reap the benefits of a changing environment. Instead, an opportunity-driven approach would result in a change in organisation set-up, seeing the transition towards a low-carbon economy as a driver for innovation and profit. It would result in a shift from focusing on internal emissions, to a full life-cycle-perspective, where the use of ICT solutions would be the most important.

#### Why are winners so important?

The economic system is constantly changing and as we move towards a low carbon economy, there will be both winners and losers. Any company that understands the need to reduce  $CO_2$  emissions has the opportunity to become a winner. Not only will these companies be able to work together with policy makers to create the future rules and regulations that will shape the market, these companies will also be able to attract employees looking for an employer that allows them to be part of a solution, rather than being part of the problem.

For politicians, it is also important to be able to identify the winners as society changes in order to ensure that jobs exist and that industrial policy is providing adequate support for those able to provide the necessary services in tomorrow's society.

## Who will be included in the project?

WWF, together with selected partners, will approach a limited number of companies that have shown an interest and have published statements and results that indicate either an interest or an already existing strategy where they provide products and services that can reduce  ${\rm CO_2}$  emissions.

## How will the results be used?

The results will be used to spur a discussion in the sector about the possibilities of turning the climate challenge into an opportunity and how the ICT sector can take the lead. •

#### ■ Draft Table of Contents for the Paper "From Risk to Profit"

#### INTRODUCTION

- 1. Background
- 2. Current management ideas/organisational structures
  - Historic overview
  - b. Popular ideas today/leading thinkers
- Drivers for change shifts in revenue streams
  [in conjunction with a world-leading consultant]
  - a. Existing revenue streams
  - b. Potential revenue streams
- The major approaches for sustainable development/
   Climate Change today
  - A risk approach and PR response
     [where companies focus on media]
  - A risk approach and EHS approach[where companies focus on compliance]
  - An HR approach and internal education/entertainment [where companies focus on employee satisfaction]
- 5. The first steps on a new path
  - a. Senior management gets involved
  - b. Analysing business opportunities
  - New organisational abilities that allow ICT companies new revenue steams
- Concrete cases (possibly also a survey) within the ICT sector where a change is beginning to happen. [in conjunction with a world-leading consultant]
  - a. Case one
  - b. Case two
  - c. Case three
  - d. Case four
  - e. Case five
  - f. Case six
- 7. Agents for change
  - a. Current changes in ICT companies
  - b. The role of customers in ICT companies
  - c. The role of regulators relevant for the ICT sector
  - d. The role of investors in the ICT sector
- 8. Possible ways forward
  - a. ICT companies
  - b. Customers
  - c. Investors
  - d. Regulators
- A framework for an opportunity-based approach to sustainability in the ICT sector (parts of the ICT sector)

# TOGETHER WWF AND HP HAVE DESIGNED AND LAUNCHED AN INNOVATIVE PRIVATE SECTOR-NGO PARTNERSHIP



# FOR FURTHER INFORMATION PLEASE CONTACT:

For strategic questions and active participation:
Dennis Pamlin, Global Policy Advisor, WWF (Project supervisor) • dennis.pamlin@wwf.se

For contributions and project-specific questions: Suzanne Påhlman, Project leader • pahlman@sent.com



