Millicom International Cellular

Corporate Position on Key Issues

Energy and Climate Change

1) Social and economic context

The use of telecommunications services can significantly reduce energy consumption, CO2 emissions and urban congestion, primarily through travel replacement (audio and video conferences, tele-working, etc). However, the telecommunications industry faces a serious economic and ecological challenge consisting of decoupling the exponential increase in telecommunications needs from an associated increase in energy consumption. Growing energy consumption generates environmental impacts like greenhouse gas emissions, a main contributor to climate change.

2) Issue at stake

Millicom operates in emerging markets where commercial electricity is often scarce and irregular. To ensure reliable cell phone networks, Millicom is particularly dependant on stand-alone sources of energy to provide continuous service to customers. Until recently, only diesel generators met these requirements at a reasonable cost.
Further reducing energy consumption is both an environmental and an economic challenge for Millicom. Improving the energy efficiency of operations and converting to renewable energy sources can both positively impact the environment and reduce network operation costs.

3) Definition of main terms

Carbon Dioxide (CO2) is a natural component of the atmosphere. It is produced during the combustion of organic matter and when animals breathe. The rapid increase, over the past century, of the combustion of fossil fuels (coal, oil, natural gas), to provide energy for human activities is increasing the amount of CO2 in the atmosphere. This increased proportion of CO2 is linked to a growing greenhouse effect of the Earth's atmosphere, which is strongly believed to cause global warming.

4) Facts and figures

Millicom's main source of energy consumption and CO2 emissions is its network equipment, mainly base stations, switches and associated cooling systems. Offices, car fleet and employee travel contribute to a much lesser extent.

Millicom operates a total of approximately 12,000 base stations in 13 countries. The majority of those base stations are connected to the commercial electricity grid. However, diesel generators produce a significant proportion of the electricity used, due to an irregular electricity supply in some countries.

Along with rising energy prices, CO2 emissions trading schemes and/or carbon taxes will make energy an increasingly significant operating cost.

5) Millicom beliefs and principles

Millicom is committed to reducing energy consumption in all sectors of its activity: network operation, vehicle fleet and offices. This reduction is being achieved through technological upgrades (low consumption equipment) and shifts (fresh air cooling systems, optical fiber, etc.), implementing alternative energy sources (solar systems, deep cycle batteries) wherever the technical and economic context make it possible, and optimizing fleet operations.

Our staff is also committed to reducing their energy consumption at the office (air conditioning, light, etc.) and when traveling (shared vehicles, use of public transport, etc.).

6) Current initiatives

Gains in network energy efficiency are being achieved by reducing the need for air conditioning of base stations, and by shifting to next generation low consumption electronic equipment. In addition, we are increasingly building our own extensions to the electricity grid, to reduce reliance on diesel generators. To further reduce our CO2 emissions, the next step is to switch from diesel to renewable energy sources.

Because commercial and alternative electricity sources remain irregular at this time, our sites remain dependant on diesel generators for energy back-up. To reduce this dependence, Millicom is starting to equip its base stations with deep cycle batteries that are able to provide electricity during power cuts of up to 12 hours. A large scale roll out is planned if the tests prove successful.

We are working to establish a more comprehensive and precise understanding of CO2 emissions related to our operations. Millicom participates in the Carbon Disclosure Project and provides information that helps estimate our global climate footprint.
In 2009, we set a target of reducing CO2 per base station by 50% by 2020.

7) Further information

Additional information sources are available from the Global e-Sustainability Initiative (GeSI), Climate Change Working Group (CCWG) and the Carbon Disclosure Project (www.cdproject.net).