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ПРОГРАММА ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ ПО ОКРУЖАЮЩЕЙ СРЕДЕ

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PRESS RELEASE

Buildings Can Play a Key Role in Combating Climate Change

Report Underlines How Often Simple and Low Cost Energy Savings Measures can Help Deliver the Kyoto Targets and Beyond

OSLO, 29 March 2007 – Significant gains can be made in efforts to combat global warming by reducing energy use and improving energy efficiency in buildings.

The right mix of appropriate government regulation, greater use of energy saving technologies and behavioural change can substantially reduce carbon dioxide (CO₂) emissions from the building sector which accounts for 30-40 % of global energy use, says a new report from the United Nations Environment Programme (UNEP) Sustainable Construction and Building Initiative (SBCI).

The new report, *Buildings and Climate Change: Status, Challenges and Opportunities*, says many opportunities exist for governments, industry and consumers to take appropriate actions during the life span of buildings that will help mitigate the impacts of global warming.

Citing the example of Europe, the report says more than one-fifth of present energy consumption and up to 45 million tonnes of CO₂ per year could be saved by 2010 by applying more ambitious standards to new and existing buildings.

Achim Steiner, UN Under-Secretary General and UNEP Executive Director, said: “Energy efficiency, along with cleaner and renewable forms of energy generation, is one of the pillars upon which a de-carbonized world will stand or fall. The savings that can be made right now are potentially huge and the costs to implement them relatively low if sufficient numbers of governments, industries, businesses and consumers act”.

“This report focuses on the building sector. By some conservative estimates, the building sector world-wide could deliver emission reductions of 1.8 billion tonnes of CO₂. A more aggressive energy efficiency policy might deliver over two billion tonnes or close to three times the amount scheduled to be reduced under the Kyoto Protocol,” he added.

“There is more low hanging fruit to be harvested. Several countries, including Australia, Cuba and the European Union are looking to phase out or ban the traditional incandescent light bulb that has been around for well over a century in various forms. The International Energy Agency estimates that a total global switch to compact fluorescent bulbs would, in 2010 deliver CO₂ savings of 470 million tonnes or slightly over half of the Kyoto reductions. We have to ask what the hurdles are-- if any--to achieving such positive low cost change and set about decisively and swiftly to overcome them, if they exist at all,” said Mr Steiner.

Key Points from the Buildings and Climate Change Report

In the life time of an average building most energy is consumed, not for construction, but during the period when the building is in use. That is, when energy is being used for heating, cooling, lighting, cooking, ventilation and so on.

Recognising this, the report pushes for a greater use of existing technologies like thermal insulation, solar shading and more efficient lighting and electrical appliances, as well as the importance of educational and awareness campaigns. Typically more than 80% of the total energy consumption takes place during the use of buildings, and less than 20% during construction of the same.

“To achieve improved energy efficiency in buildings you often do not need to use advanced and expensive high-tech solutions, but simple solutions such as smart design, flexible energy solutions and provision of appropriate information to the building users,” says Olivier Luneau, SBCI Chairman and Director for sustainability at Lafarge.

“Simple solutions can include sun shading and natural ventilation, improved insulation of the building envelope, use of recycled building materials, adoption of the size and form of the building to its intended use etc,” he said. “Of course you can achieve even better results if more sustainable construction system solutions are used, such as intelligent lighting and ventilation systems, low temperature heating and cooling systems and energy saving household appliances.”

In addition to a greater use of relevant energy saving technologies, the report stresses the importance of appropriate government policies on building codes, energy pricing and financial incentives that encourage reductions in energy consumption.

It also emphasizes that the building sector stakeholders themselves, including investors, architects, property developers, construction companies, tenants, etc. need to understand and support, such policies in order for them to function effectively.

The report also notes that approaches to finding building solutions will vary.

In developed countries the main challenge is to achieve emission reduction among mostly existing buildings, and this can largely be done by reducing the use of energy.

In other parts of the world, especially places like China where almost 2 billion square meters of new building space is added every year, the challenge is to leapfrog directly to more energy efficient building solutions, the report says.

The Buildings and Climate Change report will be presented to the annual general meeting of the SBCI, which is convened in Rabat, Morocco, from 2 to 4 April 2007.

The SBCI is an international partnership to “green” the multi-billion dollar building and construction sector. Launched one year ago with UNEP, it now has some thirty members including some of the biggest names in the business such as Lafarge, Skanska and Arcelor.

The SBCI secretariat is hosted by the UNEP Division of Technology, Industry and Economics in Paris.

Copies of the UNEP SBCI Buildings and Climate Change report can be downloaded from <http://www.unep.fr/> or www.unep.org

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