SUSTAINABLE ENERGY FOR ALL

DOUBLING THE SHARE OF RENEWABLE ENERGY

Energy from renewable resources—wind, water, the sun, and geothermal sources—is inexhaustible and clean.

The costs of technologies to capture that energy are rapidly falling and becoming economically competitive with fossil fuels, while reducing the risk of climate change. Renewable energy can also be the most practical solution in delivering power to rural and impoverished areas.

United Nations Secretary-General Ban Ki-moon is calling on businesses, governments and civil society to achieve Sustainable Energy for All.

Doubling the global rate of improvement in energy efficiency by 2030 is an essential part of the Secretary-General's vision.

At the heart of his vision are three complementary objectives: achieving universal access to modern energy services; doubling the global rate of improvement in energy efficiency; and **doubling the share of renewable energy in the global energy mix**. Realizing these three objectives will drive economic growth, improve social equity, and protect our environment. Together, they will power the world toward a cleaner, healthier, and more sustainable future.

$260 BILLION
WORLDWIDE INVESTMENT
The world's investment in clean energy more than doubled in the last five years—to $260 billion in 2011.[1]

MORE THAN
70%
of the growth in renewable electricity generation since 2000 came from non-OECD countries.[2]

THE BOTTOM LINE

Renewable energy products and services constitute a rapidly growing segment of the international marketplace. Total new investment in clean energy increased last year to $260 billion in 2011.[3] Electricity from the wind, sun, waves and biomass drew $187 billion last year compared with $157 billion for natural gas, oil and coal.[4] Some recent scenarios estimate that renewables will contribute more to a low carbon energy supply by 2050 than nuclear power or fossil fuels using carbon capture and storage (CCS).[5]

Investing in renewable energy creates jobs, fosters economic growth, and improves energy security for countries that lack domestic fossil fuel resources. Increasing the share of energy gleaned from renewable sources can reduce greenhouse gas emissions and local pollution; insulate countries from fuel price volatility; and improve those countries' balance of payments. Renewable energy is becoming increasingly cost-competitive. Hydro, geothermal and bioenergy have long been competitive where resources are available, and wind and solar are also economically attractive in many locations.

*"**Energy is the golden thread** that connects economic growth, increased social equity, and an environment **that allows the world to thrive**."*

– UN SECRETARY-GENERAL BAN KI-MOON

1 Bloomberg New Energy Finance, 2012
2 Intergovernmental Panel on Climate Change, *Special Report on Renewable Energy Sources and Climate Change Mitigation*, 2011
3 Bloomberg New Energy Finance, 2012
4 Bloomberg News, *Renewable power trumps fossil fuels for first time*, 2011
5 Intergovernmental Panel on Climate Change, Press Release, Potential of Renewable Energy Outlined in Report by the Intergovernmental Panel on Climate Change, 2011

Renewable energy currently constitutes 15% of the global energy mix.[6] Achieving the Secretary-General's objective of doubling that percentage by 2030 requires support from all sectors of society, including the public.

In a 2008 study, people in 24 countries were asked if utilities should be required to use more alternative energy, such as wind and solar, even if this increases the cost of energy in the short run. In France, 88% of respondents were in favor of this requirement, compared with 87% in Kenya, 75% in China, and 66% in the United States.[7]

COMMITMENTS THAT BENEFIT ALL

The United Nations is ideally suited to convene key stakeholders at both the global and national level to achieve the vision of Sustainable Energy for All. Governments, businesses, and civil society can all make tangible commitments toward renewable energy. Commitments might include:

- **Establishing collaborative public-private partnerships** that set specific renewable energy targets with coordinated efforts to achieve them.
- **Developing communities of practice** to foster peer learning, capacity building, and expert assistance across governments, companies, NGOs, and financial institutions.
- **Identifying creative solutions** to reduce barriers in financing and regulatory frameworks.
- **Creating business incentives for innovation** in renewable energy in partnership with government innovation programs.
- **Demonstrating public sector leadership** by using renewable energy in facilities and procurements.
- **Developing new financing partnerships** to de-risk private investment in developing countries.
- **Adopting government policies** to promote investment, manage risk, and reduce impediments to adopting renewable energy.
- **Implementing and/or scaling up** existing renewable projects.

MORE THAN
50%
CURRENT CAPACITY
Developing countries host more than 50 percent of current global renewable energy capacity.[8]

24–FOLD
INCREASE IN CAPACITY
In the last five years China has achieved a 24-fold increase in its installed wind capacity to lead the world.[9]

SOLAR ENERGY POTENTIAL
25–800X
CURRENT DEMAND
The technical potential of solar energy alone exceeds total current global energy demand by 25 to 800 times.[10]

Doubling the share of renewable energy in the global energy mix is achievable. Countries with abundant biomass resources, like Sweden and Brazil, now get 50 percent of their energy from renewable resources. The rapid expansion of wind power has enabled Denmark to obtain 20 percent of its total energy from renewable sources. In Bangladesh, more than 500,000 solar home systems were installed in just three years.[11] Uganda has diversified its renewable energy mix by increasing the amount of renewable energy in the pipeline by 60%.[12]

The challenge of increasing the use of renewable energy is significant. The opportunities are greater still: **Economic growth. New markets. Sustainable and equitable development. A cleaner planet.** These are within the world's reach by 2030. Those who act now to improve renewable energy are creating the future we want.

6 International Energy Agency World Outlook 2011, citing Global Energy Assessment
7 WorldPublicOpinion.org / Program on International Policy Attitudes (PIPA) at the University of Maryland, 2008
8 Bloomberg New Energy Finance, 2011
9 Intergovernmental Panel on Climate Change, Press Release, Potential of Renewable Energy Outlined in Report by the Intergovernmental Panel on Climate Change, 2011
10 Intergovernmental Panel on Climate Change, *Special Report on Renewable Energy Sources and Climate Change Mitigation*, 2011
11 Grameen Shakti, *Green Solutions: Solar PV Program*
12 UN Environment Programme, 2012

SUSTAINABLE ENERGY IS
POWERING ***opportunity.***