

*European Union Briefing
New York, 7 October 2009*

Sustainable Development:

***Promotion of New and Renewable
Sources of Energy
(Report of the Secretary-General)***

Division for Sustainable Development

UN-DESA



Background

- General Assembly reaffirmed in its Resolution 62/197 the importance of energy for sustainable development, especially the need for the promotion of new and renewable sources of energy.
- The General Assembly requested the Secretary-General to submit to it at its 64th session a report on the implementation of its resolution 62/197.
- The present report is submitted pursuant to that request.

Promotion of Renewable Energy Key Issues (i)

- Access to affordable, modern energy is a prerequisite for achievement sustainable development and the Millennium Development Goals.
- There is still an urgent need to provide energy access to developing countries.
- Renewable energy can play a crucial role in providing energy access as well as in reducing greenhouse gas emissions, enhancing energy security, and accelerating economic growth and employment.

Promotion of Renewable Energy Key Issues (ii)

- The world is facing the challenges of global warming and increasing global energy demand. This requires greater energy diversification and an increase in the share of renewable energy in the global future energy supply.
- However, the current share of renewable energy is still low, due to the high costs of many renewable energy technologies.
- It is of utmost importance to increase the cost-competitiveness of renewable energy technologies.

Promotion of Renewable Energy Key Issues (iii)

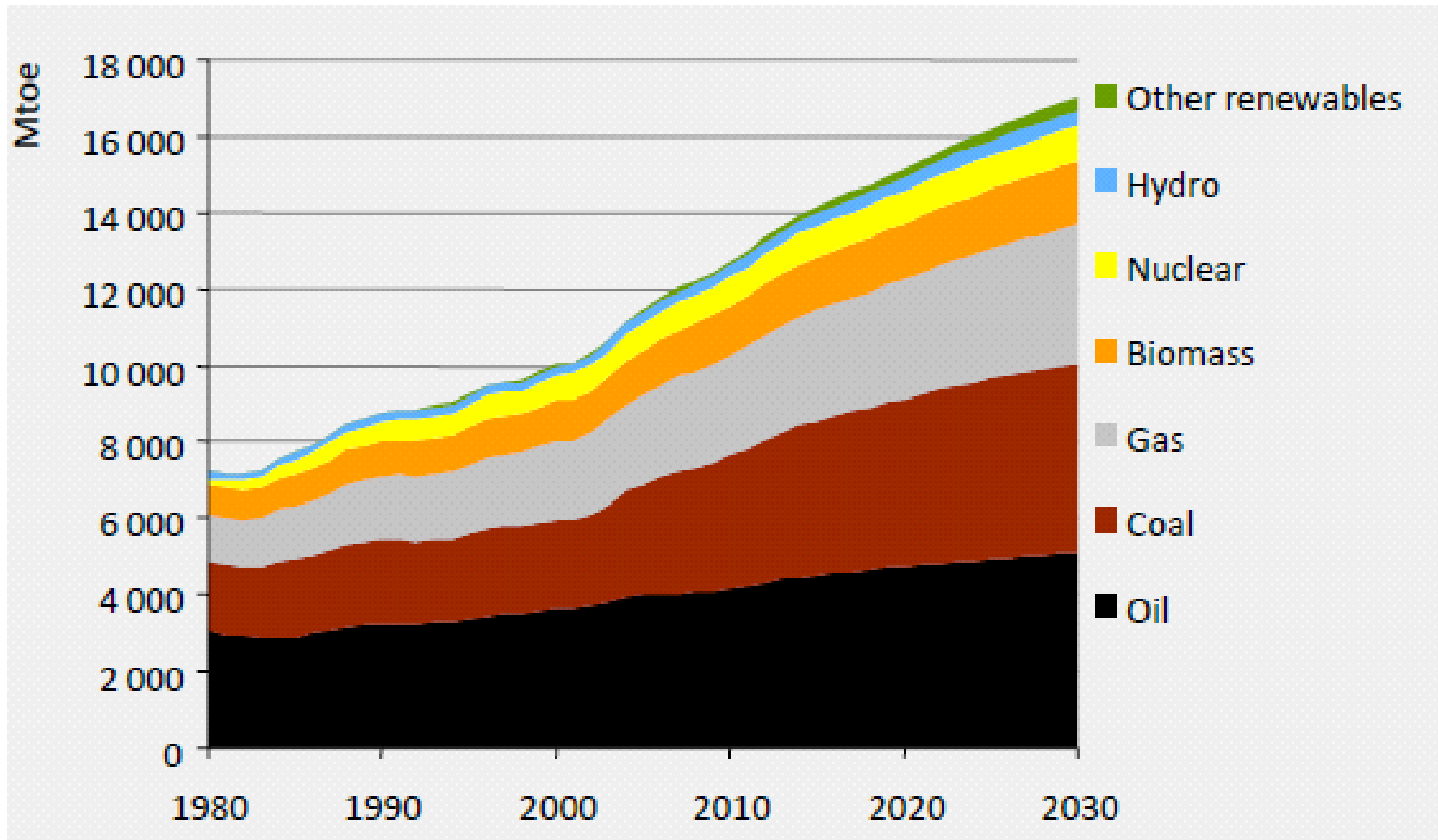
Adequate national policies and programmes must create an enabling regulatory framework to ensure:

- Research, development, deployment and transfer of renewable energy technologies, especially to developing countries
- Public and private investments in renewable energy at local, national and international levels
- Public-Private Partnerships and international cooperation.

A Major Transformation of the World Energy System

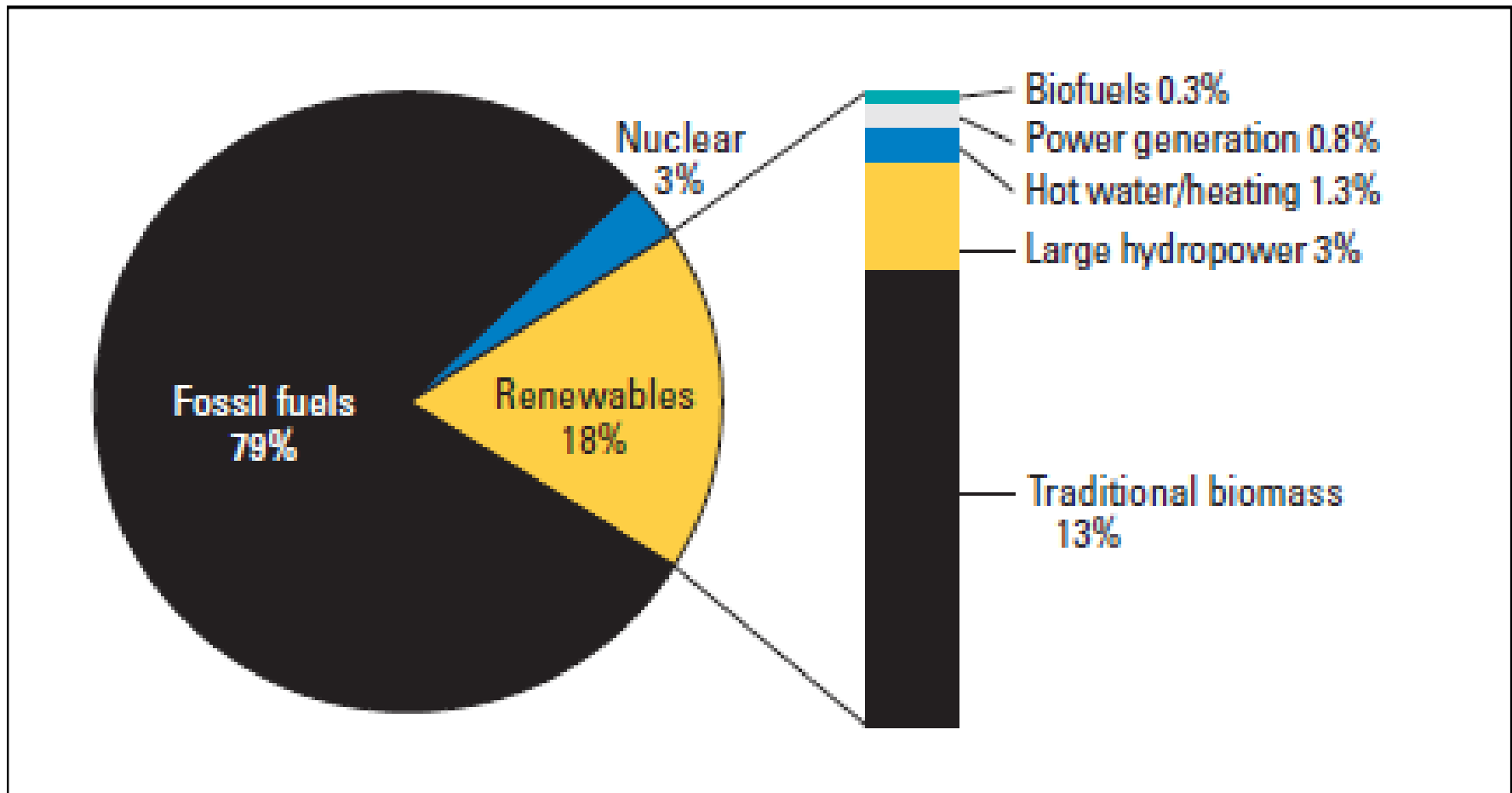
- To increase *energy access*
- To satisfy dramatic increase in energy demand
- To improve efficiencies
- To shift to low-carbon and environmentally-sound technologies
- ✓ ***Renewable Energy can play a crucial role***

World Primary Energy Demand (IEA Reference Scenario)



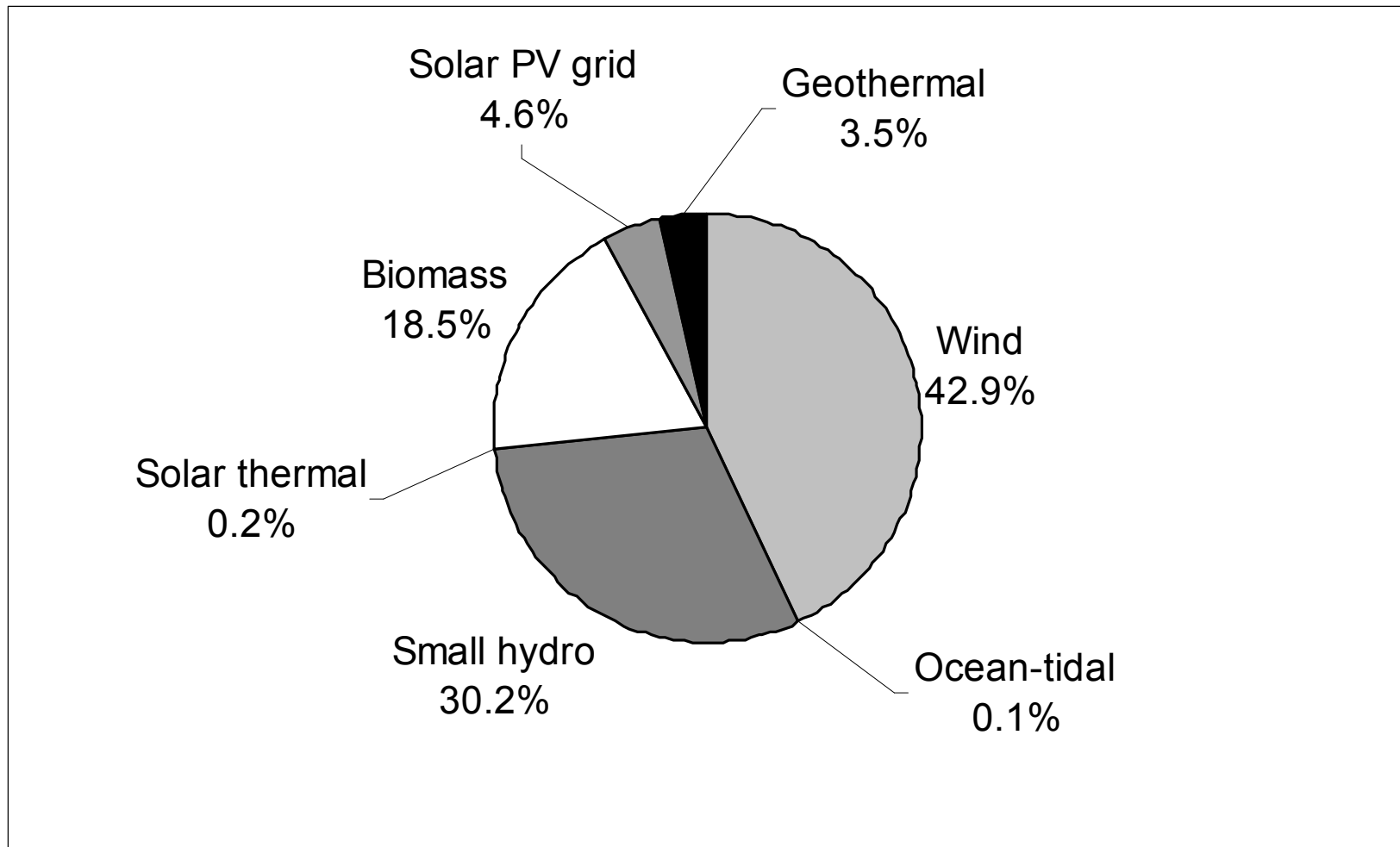
Source: IEA, WEO 2008.

Renewable energy share of global final energy consumption



Source: REN21: Renewables 2007 Global Status Report, 2008a .

Renewable electric power capacity by share type



Source: REN21: Renewables Global Status Report, 2009 Update .

Renewable Energy Investments 2008-2009

- Investments in 2008 in renewable energy power capacity additions surpassed conventional capacity additions
- 2008 Global renewables investment increased by 13% to \$117 billion. Investments in developing countries increased by 27%
- A 53% decrease in investment in the first quarter of 2009 resulted from the global financial crisis
- Leading economies announced national Green economic stimulus packages for over \$180 billion for sustainable energy

Barriers to Renewable Energy Technology development and transfer

- Technical potential of renewable energy is huge but there are many barriers affecting development, transfer and adoption
- Financial, institutional, infrastructure, market, information, legal barriers
- Financial barriers usually the main constraint
- Securing funding for high upfront investment
- Cost of renewables as compared to competing conventional alternatives

Costs of renewable energy technologies

- Cost comparisons vary considerably and depend on many factors
- Some factors include: availability and capacity factors, size, geographic location and financial factors
- A comparison from REN21 (WB, NREL and IEA) for power generation:

Technology	Cost in US cents/kWh
Large hydropower	3-4
Small Hydro	4-7
Onshore Wind	5-8
Offshore Wind	8-12
Biomass	5-12
Geothermal	4-7
Solar Photovoltaic	20-80
Concentrating Solar	12-18
<i>Conventional Power</i>	<i>4-8</i>

Policy Options

- Renewable energy policy targets
- Feed-In Laws that offer producers a guaranteed feed-in tariff & provide a price guarantee reducing regulatory and market risks
- Renewable energy quotas / portfolio standards impose a minimum use of renewable energy
- Legal guarantees for access to electricity grids
- Biofuels mandates
- Rural electrification programmes
- Energy pricing / Carbon price

International Cooperation

- International financial institutions (WB, GEF, regional development banks) provide funding
- Many UN agencies promote renewable energy (UNDESA, UNIDO, UNEP, UNDP, HABITAT, etc.)
- Many international partnerships contribute to promotion of renewables such as: the African-European Union Energy Partnership, DESERTEC, Regional Centre for RE in Middle East and North Africa, etc.
- International Renewable Energy Agency (IRENA)

Concluding Remarks (i)

- Renewable energy will play a key role in the global transformation of the energy system
- Renewables represent a clean alternative with large available potential
- RE can play a crucial role in accelerating economic growth & employment, reducing GHG emissions, enhancing energy security and achieving sustainable development
- International cooperation is essential to tackle major barriers
- Public and private sectors have important roles in funding research, development and transfer and in reducing the cost
- National policies and international mechanisms are necessary to promote renewable energy

Concluding Remarks (ii)

- Policies must be stable, consistent and predictable
- Green economic stimulus packages provide good opportunity for more sustainable growth
- Need for commitments at UN Climate Change Conference in Copenhagen this year
- Paradigm shift in global energy markets towards RE is needed to ensure sustainable development

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Thank you!

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