



SUSTAINABLE ENERGY
FOR ALL

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2012 INTERNATIONAL YEAR OF
SUSTAINABLE ENERGY
FOR ALL



IRENA
International Renewable Energy Agency

Sustainable Energy for All Initiative

2014-2024 UN decade of SE4ALL

Three objectives:

- Universal access to modern energy by 2030
- Doubling of rate of energy efficiency gains
- Doubling the renewable energy share

IRENA is the hub for renewable energy: translate REmap into action

Chaired by UN SG and President of World Bank
Global Facilitation Team

IRENA DG Adnan Amin co-chair of RE Committee

A public-private partnership (governments, finance institutions
equipment manufacturers, utilities, international organizations
NGOs, foundations)



One Goal: SE4ALL and Three Inter-related Targets by 2030

Linkages to Other Key Sectors – Importance of **Country- Driven** Integrated Approaches and **Partnerships**

Energy Cuts Across Sust Devt. Issues

Achieving the three
targets of SE4ALL
Sustainable Energy
for All...

... makes many
development goals
possible



Ensuring universal **Access to Modern Energy Services**

- Improved **health**
- Improved agricultural **productivity**
- Empowerment of **women**
- Business and **employment** creation
- Economic development
- Achievement of the **MDGs and SDGs**



Doubling the share of **Renewable Energy** in global energy mix

- Affordable energy even where grid does not reach - **Access**
- New opportunities for small entrepreneurs – **Economic Inclusiveness**
- Decreased variability in energy costs – **Energy Security**
- Energy security and reduced import bills
- Reduced environmental impacts including **CC**



Doubling the global rate of improvement in **Energy Efficiency**

- Lighting / appliances that require less power
- Fossil fuel resources used more effectively
- Reduced energy costs for consumers
- Redistribution of electricity that now is wasted or lost
- More reliable electricity systems
- **More efficient use of resources**

Sustainable Energy for All initiative

A Global Platform for Partnerships

All parties must act...

...and work together to realize a world with Sustainable Energy for All

Public Sector providing Enabling environment/ Derisking

*National governments
Public institutions
Cities and municipalities
Multilateral organizations
Bilateral development partners*

Businesses providing Finance and know-how

*Energy companies
Equipment suppliers
Financial players
All companies making their
Operations and supply chains more
efficient*

Civil society

*NGOs
Academic institutions
Individuals
Civil society becoming involved
by training people, offering
Technical expertise*



Catalyzing Country-Driven Action

Current Status



- More than **80 developing countries already involved** spanning four continents – a large number of partners now engaged – implementation starting in many countries across the developing world
- Streamlined process to **catalyze action**: gap analysis, creation of national Action Agendas (that include support for the improvement of enabling environment and capacity building) and Investments Prospectuses, implementation, monitoring

Outcomes Expected

- Scaling up of investment through public-private partnerships
- Helping realize the potential across the three targets **Access - renewables** as well as **energy efficiency**



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SE4ALL

A Platform for Collaborative Action

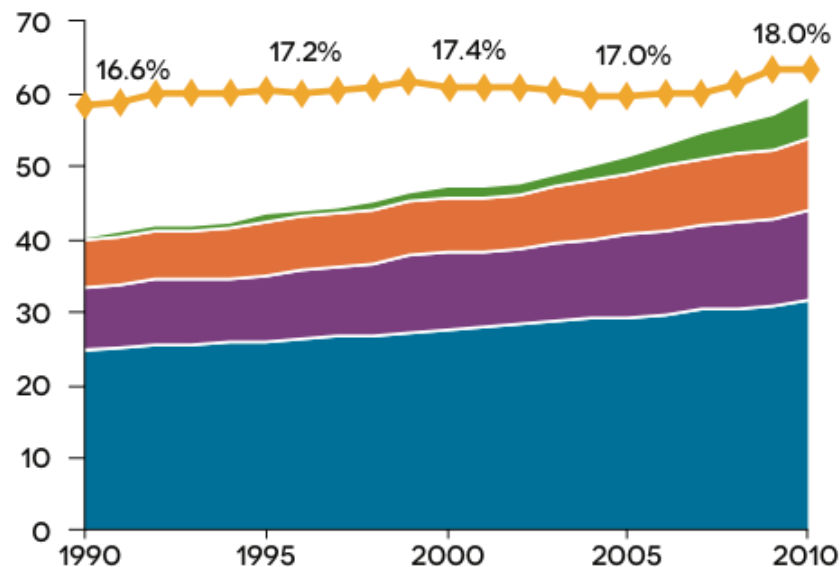
- Most countries have on-going energy plans/strategies = the rapid assessment/gap analysis is meant to identify action/investments/and other implementation and scaling up needed to reach objectives by 2030
- Many have undergone power sector reforms; and have targets – e.g. in electricity/building standards codes, transport energy efficiency codes, etc.
- Many have started design of Nationally Appropriate Mitigation Actions (NAMAs of UNFCCC)
- Many are already participants of major international initiatives (SREP, Energy+, US Partnership for Renewable Energy Finance, etc.)
- SE4ALL offers a platform for partnerships - collaborative action and leverage by all of these in support of the three goals
- SE4ALL is designed to mobilize global support for national action plans designed by countries according to their circumstances and priorities



RENEWABLE ENERGY

THE BIG
CHALLENGE AHEAD

Overall share of renewable energy has remained quite flat, albeit some sources grew exponentially from a small base

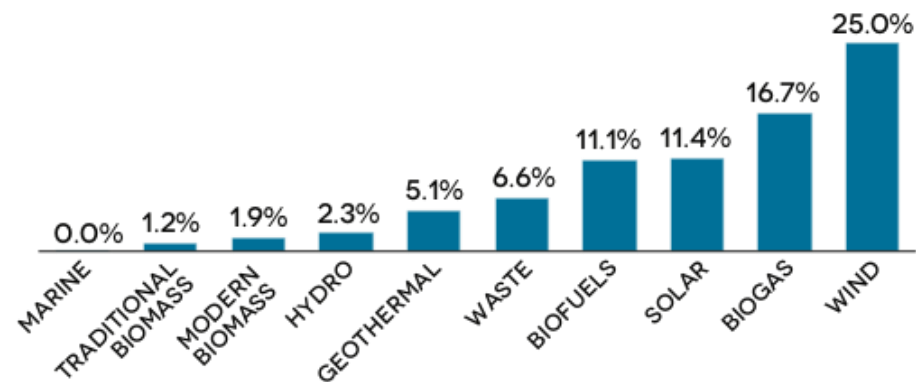


WORLD CONSUMPTION OF RENEWABLE ENERGY (EXAJOULES) AND SHARE OF RENEWABLE ENERGY IN TFE (%)

■ OTHER RE
 ■ HYDRO
 ■ MODERN BIOMASS
 ■ TRADITIONAL BIOMASS
 ◆ RE SHARE IN TFE

SOURCE: IEA 2012A.

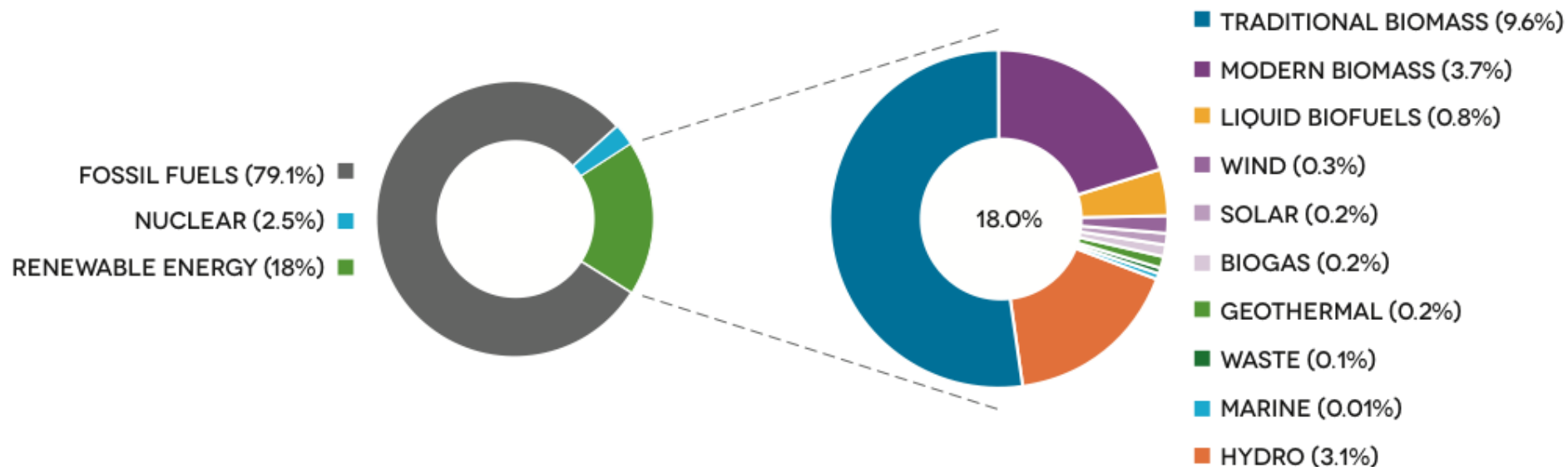
NOTE: TFE = TOTAL FINAL ENERGY CONSUMPTION; RE = RENEWABLE ENERGY.



COMPOUND ANNUAL GROWTH RATES (CAGRS) BY RENEWABLE ENERGY SOURCE, 1990-2010

SOURCE: IEA 2012A.

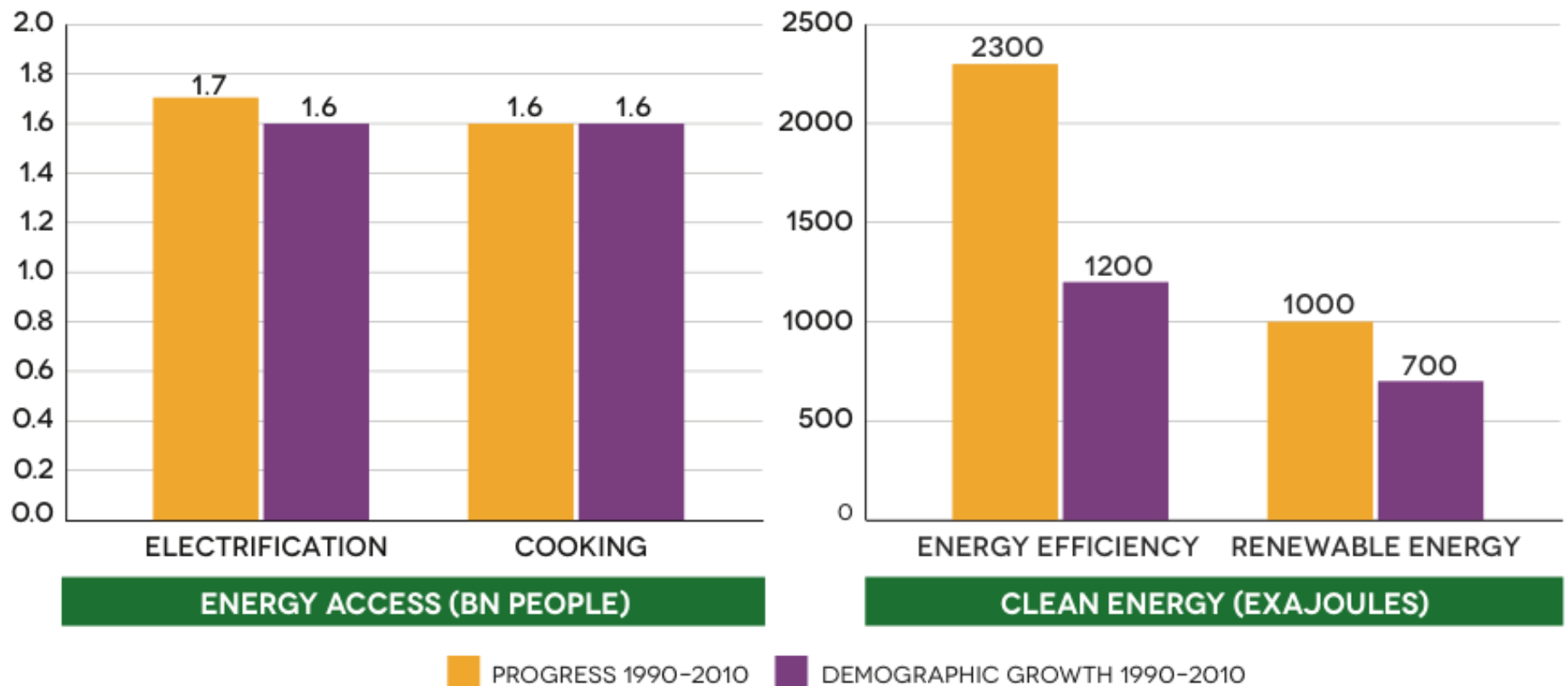
Traditional biomass accounts for over half of renewable energy, mainly for heating and cooking



SHARE OF RENEWABLE ENERGY IN GLOBAL TFC, 2010

SOURCE: IEA

Progress of the last 20 years has only kept slightly ahead of huge growth in population and energy demand

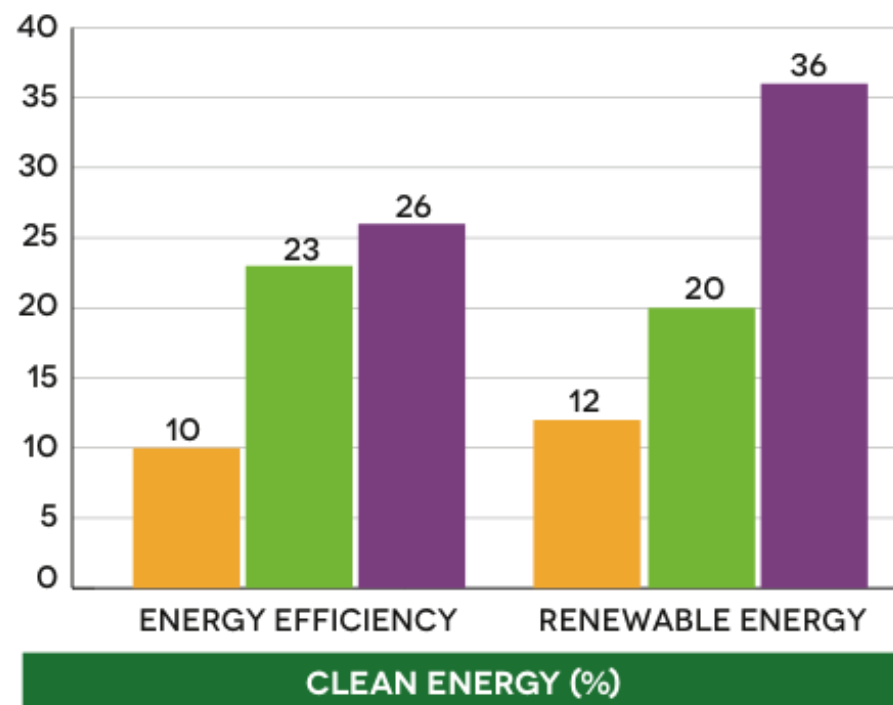
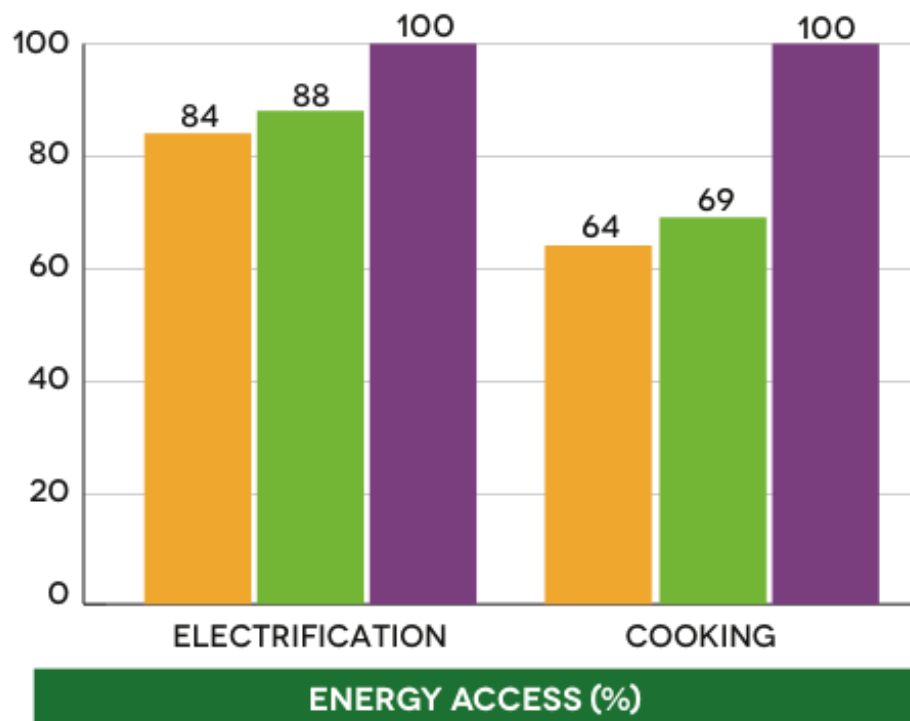


SOURCE: WB, WHO, IEA

Starting point for SE4ALL goals can be established on this basis

Percent	Universal access to modern energy services		Doubling global rate of improvement of energy efficiency	Doubling share of renewable energy in global energy mix
	Proxy indicator	Proxy indicator	Proxy indicator	Proxy indicator
	Percentage of population with electricity access	Percentage of population with primary reliance on non-solid fuels	Rate of improvement in energy intensity	Renewable energy share in TFE
1990	76	47	-1.3	16.6
2010	83	59		18.0
2030	100	100	-2.6	36.0

Global models show that business as usual falls well short of where we need to be by 2030



■ BUSINESS AS USUAL (GEA BASELINE) ■ BUSINESS AS USUAL (IEA NPS) ■ 2030 OBJECTIVE

SOURCE: IEA, IIASA



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