



GLOBAL TRACKING FRAMEWORK



SUSTAINABLE
ENERGY FOR ALL

SCALE OF CHALLENGE

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New York, June 25, 2013

COORDINATORS:



UN-Energy



Sustainable Energy For ALL has gathered momentum

- 3 Goals Adopted in 2011
 - Universal access to electricity and modern cooking fuels
 - Double the rate of improvement of global energy efficiency
 - Double the share of renewables in global energy mix
- UN Secretary General and WB President are co-Chairs of Advisory Board
- More than 70 countries have opted-in
- Three goals are among the four proposed by the post-2015 high-level panel report
- Global Tracking Framework Report launched in May, 2012

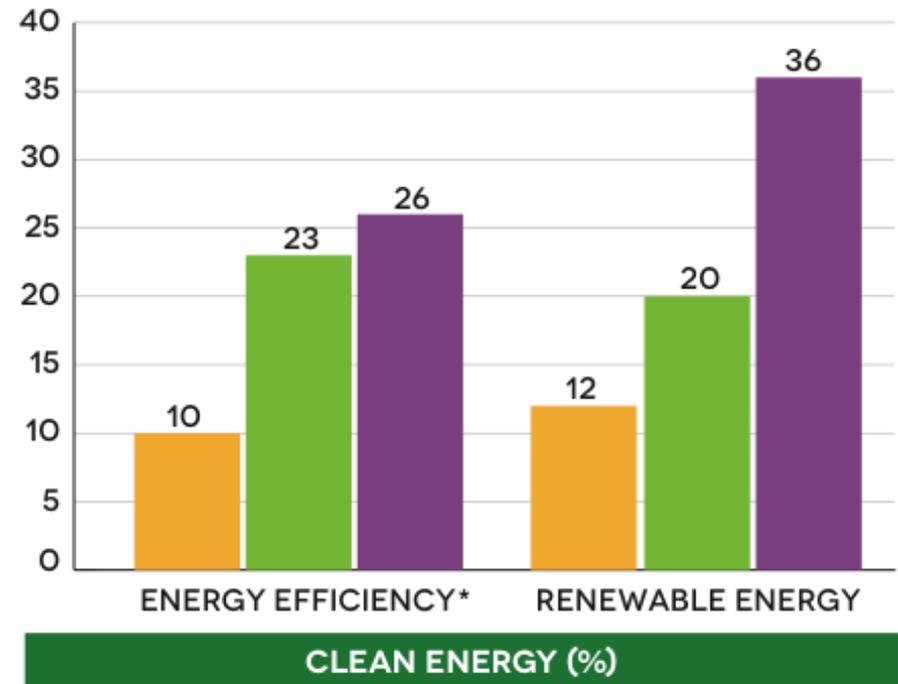
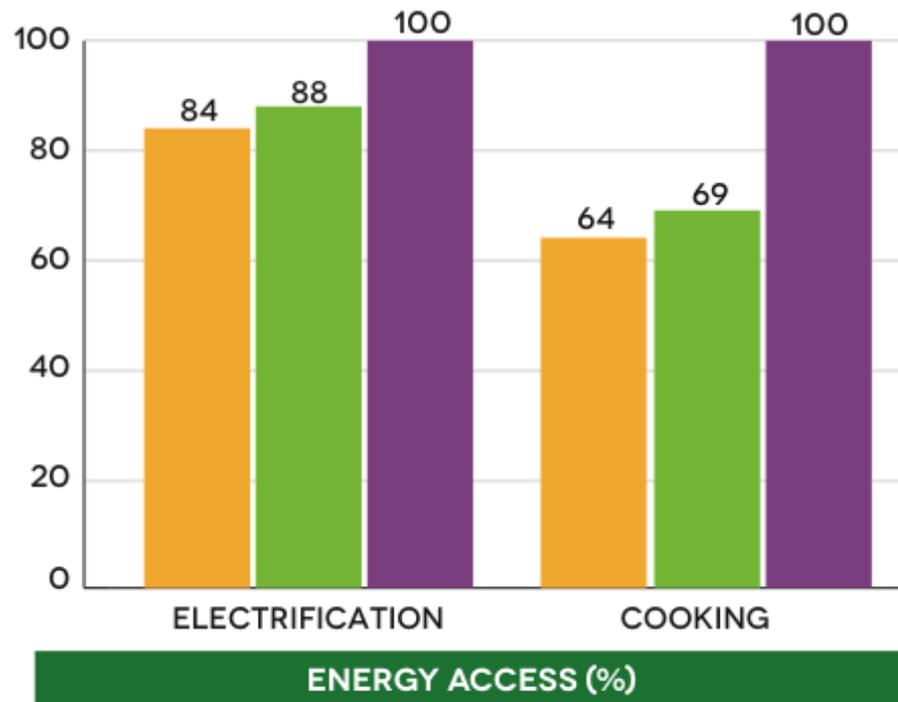
We now have a global tracking framework for SE4ALL

- **Process of consensus building among 15 partner agencies and 100+ stakeholders in two rounds of public consultation**
- **Data platform**
 - 180+ countries covering 98% of global population
 - 20 year history 1990-2010
 - Main sources are household surveys and national energy balances
 - Collated from primary data held by IEA, UN, WB, WHO
- **Central (plus supporting) indicators**
 - Percentage of population with an electricity connection
 - Percentage of population making primary use of non-solid fuels
 - Percentage of total final energy consumption from renewable sources
 - Compound annual growth rate of primary energy intensity to GDP in PPP

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	Percentage of population with electricity access	Percentage of population with primary reliance on non-solid fuels	Rate of improvement in energy intensity
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

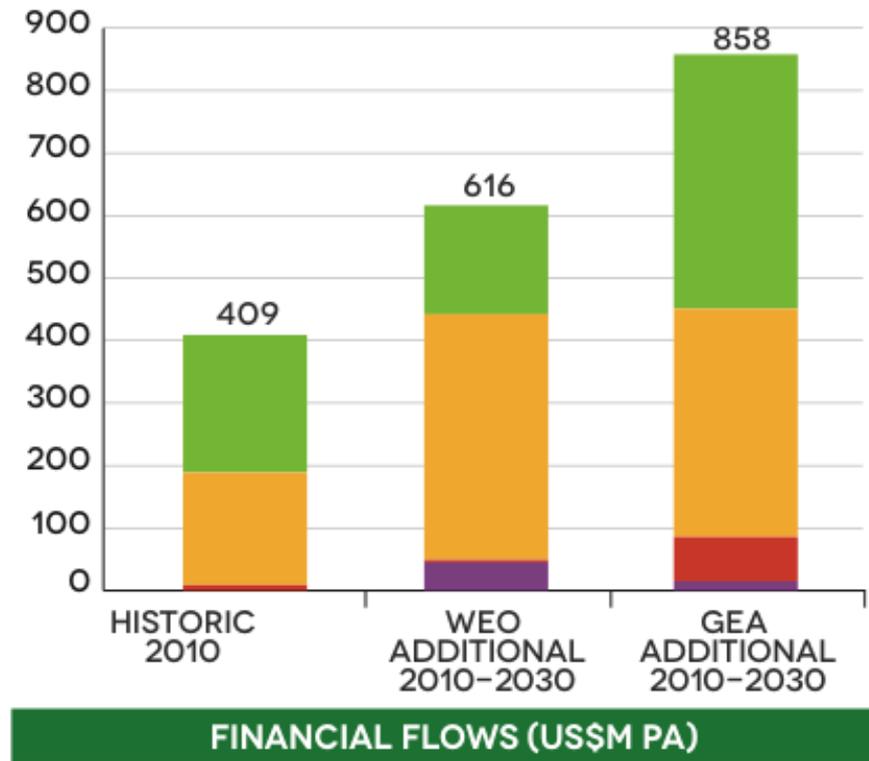
SOURCE: IEA, IIASA

* ENERGY EFFICIENCY PERCENTAGES ARE MULTIPLIED BY 10 TO MAKE UNITS CONSISTENT WITH RENEWABLE ENERGY

Achieving objectives will take bold policy action aimed at doubling or tripling financial flows

Bold policy actions

- Phase out untargeted fossil fuel subsidies
- Design carefully targeted subsidies for access
- Introduce price signals for local and global environmental impacts
- Adopt stringent technology standards for efficiency



RENEWABLES EFFICIENCY COOKING ELECTRIFICATION

SOURCE: IEA, IIASA

Better data and better standards for better results – all tracking indicators can be significantly improved

➤ **Electrification**

- Some over-estimation due to inability to capture quality and reliability of service as well as services supported – need for multi-tier framework

➤ **Cooking**

- Some under-estimation due to inability to capture whether improved cookstoves are being used – need for multi-tier framework

➤ **Energy efficiency**

- Some mis-estimation due to inability to drill down to physical indicators at sectoral, sub-sectoral and process levels – need for better data

➤ **Renewable energy**

- Some over-estimation due to inability to capture whether or not (traditional biomass) being used sustainably – need for protocols



Global Tracking Framework

The SE4ALL Global Tracking Framework full report, overview paper, executive summary, powerpoint presentation and associated datasets can be downloaded from the following website:

www.worldbank.org/se4all

Funding from ESMAP and DFID is gratefully acknowledged

COORDINATORS



ADDITIONAL SLIDES
SE4ALL IMAGE LOOP



OBJECTIVE

1

ENERGY ACCESS

PROVIDING UNIVERSAL ACCESS TO MODERN ENERGY

2030 GOAL: 100% GLOBAL ACCESS TO



ELECTRICITY

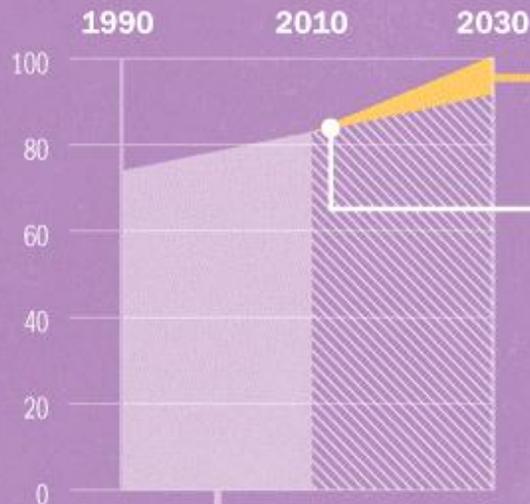
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MODERN FUELS
for cooking

GLOBAL ACCESS TO ELECTRICITY

Pace needs to increase by 38% to reach goal by 2030



during the last 20 years

1.7 BILLION PEOPLE
gained access to electricity

BUSINESS AS USUAL WOULD LEAVE 12-16%
of the world's population without electricity

1.2 BILLION PEOPLE
HAVE NO ACCESS TO ELECTRICITY TODAY

ACCESS TO ELECTRICITY
is essential to end poverty



OBJECTIVE

1

ENERGY ACCESS

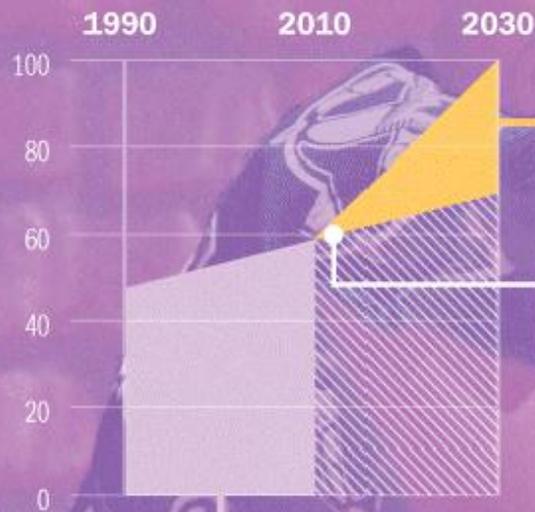
PROVIDING UNIVERSAL ACCESS TO MODERN ENERGY

GLOBAL ACCESS TO MODERN FUELS FOR COOKING

Pace needs to increase by 2.5 times to reach goal by 2030

BUSINESS AS USUAL WOULD LEAVE 31-36%

of the world's population without modern cooking solutions



2.8 BILLION PEOPLE

RELY ON SOLID FUELS, SUCH AS WOOD & COAL, FOR COOKING TODAY

Access to safe household fuels will end

FOUR MILLION DEATHS

a year caused by

toxic indoor smoke.

during the last 20 years

1.6 BILLION PEOPLE

gained access to less-polluting household fuels

Learn more in the Sustainable Energy for all
Global Tracking Framework Report:

www.worldbank.org/se4all



OBJECTIVE

2

DOUBLING THE RATE OF IMPROVEMENT IN GLOBAL ENERGY EFFICIENCY

Primary world energy consumption



1990

CONSUMPTION

367

EXAJOULES

ENERGY INTENSITY

10.2

MEGAJOULES \$ / PPP



2010

CONSUMPTION

534

EXAJOULES

ENERGY INTENSITY

7.9

MEGAJOULES \$ / PPP



2030

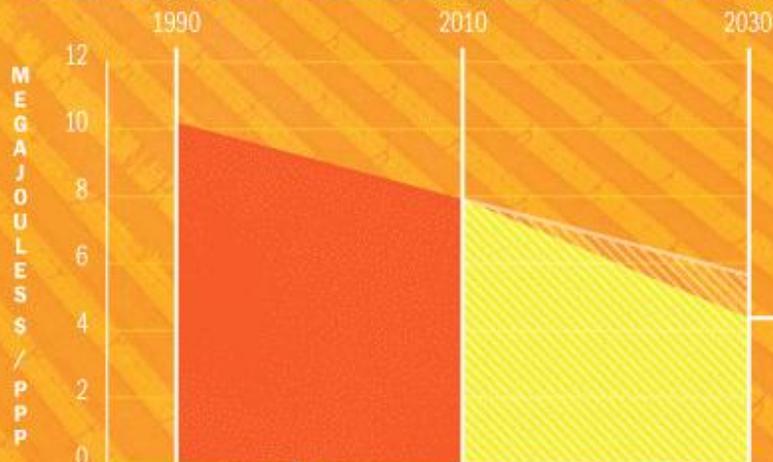
ENERGY INTENSITY

4.7

MEGAJOULES \$ / PPP

Primary World Energy Consumption is 36% lower than it would have been without the improvements.

ENERGY INTENSITY: A MEASURE OF ENERGY EFFICIENCY



DOUBLING THE RATE OF IMPROVEMENT OF

ENERGY EFFICIENCY SAVES ENERGY, MONEY & EMISSIONS.

From 1990 to 2010, nearly **2,300 EXAJOULES** of energy were saved

Equivalent to more than 25 years of primary energy consumption in the United States

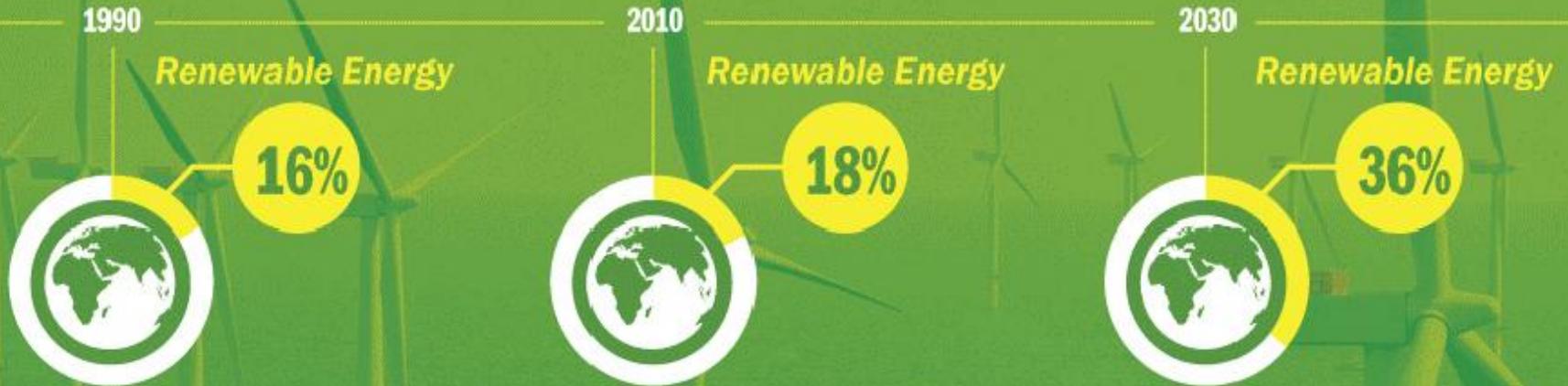


OBJECTIVE

3

DOUBLING THE SHARE OF WORLD'S MIX OF RENEWABLE ENERGY

Pace needs to increase by 2.5 times historical growth rate to reach goal by 2030



SUGGESTED TACTICS TO REACH GOAL BY 2030:

ESTABLISH

a price for carbon

PHASE OUT

untargeted fossil fuel subsidies

INTRODUCE

policy incentives for renewable energy such as feed-in tariffs, renewable portfolio standards, auctions

INCREASE

capital flows and reduce risks associated with investing in renewable energy