United Nations Environment Programme
en.lighten initiative

How the integrated policy approach has been implemented? (Part I)

4 June February 2015, Bonn

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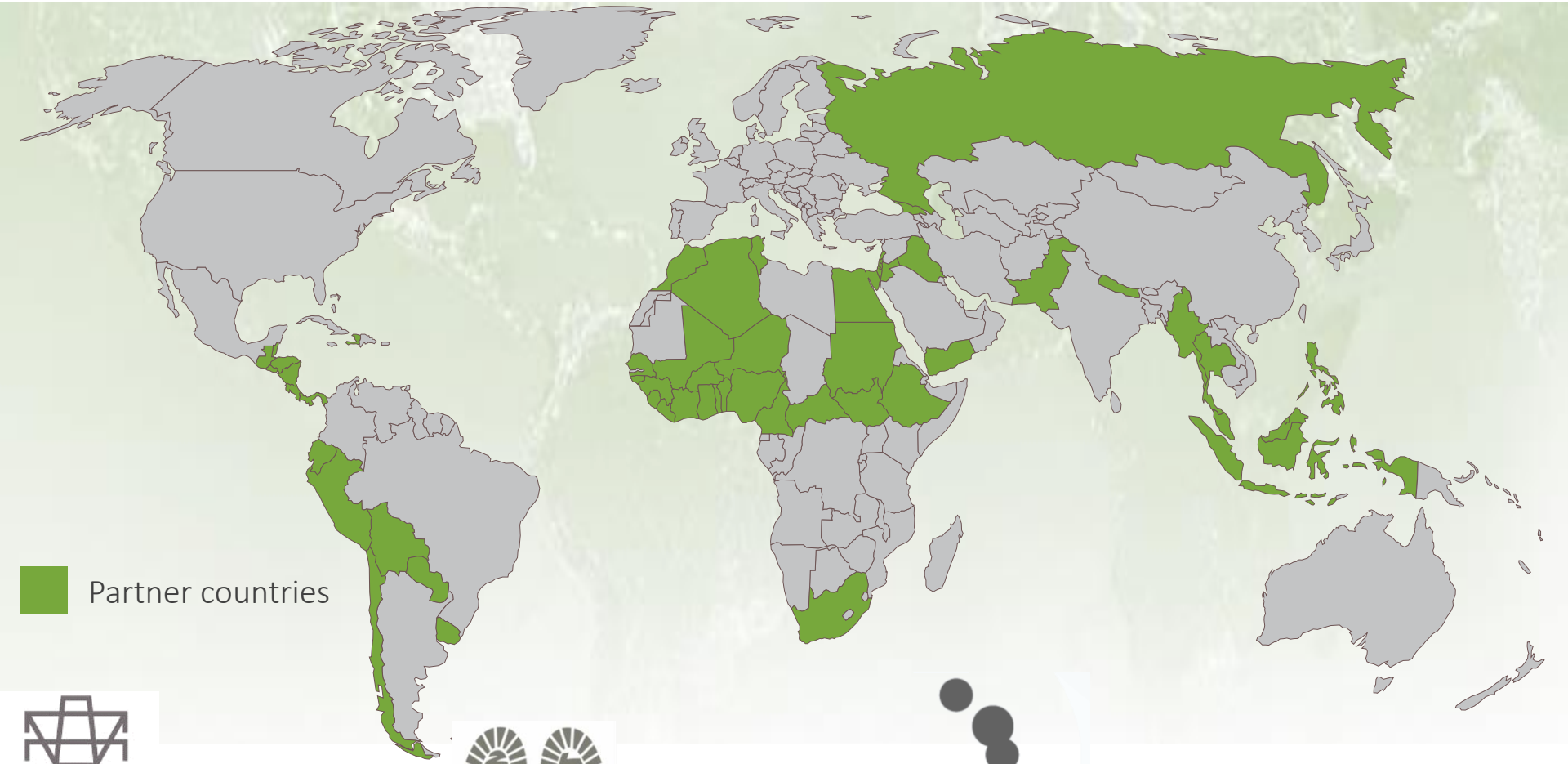
- Global consensus to phase out inefficient incandescent lamps by 2016*
- Support countries in making the move

* *By 2016 all countries should have either phased-out inefficient incandescent lamps or have policies in place to phase-out within a given timeframe*

66 Partner Countries and Benefits



> 80 TWh
saved per year

> 35 million
tonnes of CO_2 savings

> $7.5 billion
savings per year (USD)

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The Integrated Policy Approach

- MEPS: ensure efficiency and quality of lighting products, removing obsolete technologies
- Supporting policies: promote public acceptance and demand for energy-saving lighting
- Monitoring, verification and enforcement: ensure regulatory compliance and a level playing field
- Environmentally sound management for sound disposal and/or recycling of used lamps

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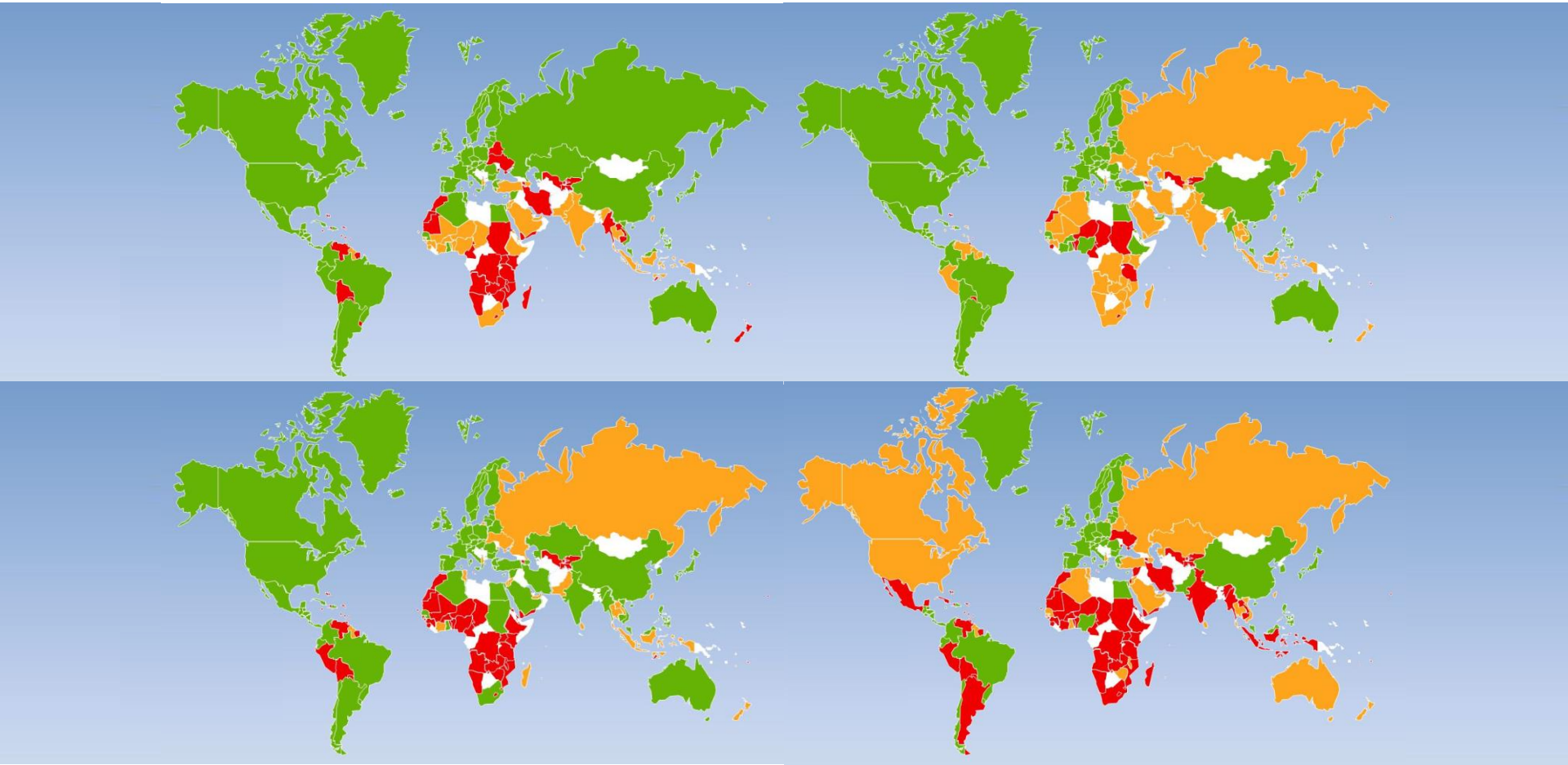
Global Status (2012) – Integrated Policy Approach

Minimum Energy Performance Standards

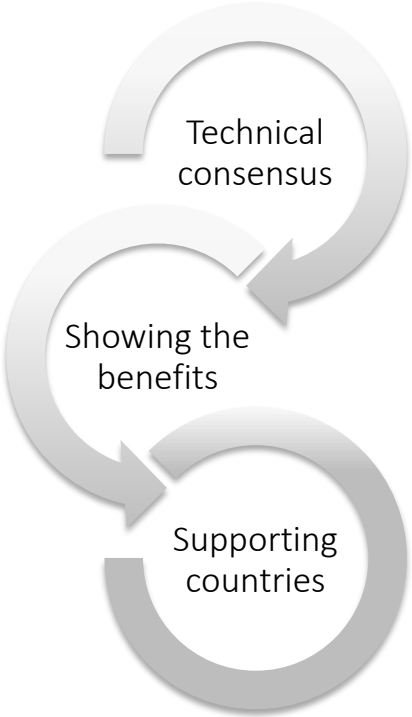
Supporting Policies



Monitoring, Verification & Enforcement

Waste Management

en.lighten Center of Excellence: Country Support



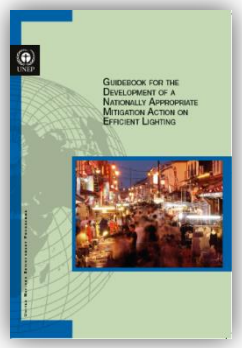
1 Expert groups on Policy, regulation & finance, Quality & Environmental issues

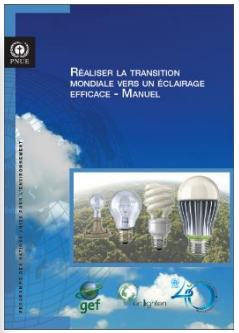
2

- Country Lighting Assessments
- Regional lighting workshops
- Phase-out policy target 2016

3

- → Development of national & regional lighting strategies
- → Technical & financial assistance
- → Guidance materials & tools
- → Website and "en.lightened learning" portal
- → Forecast tools, technical webinars





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Thank You

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gef

PHILIPS

OSRAM

nltc National Lighting Test Centre China

Australian AID

Back-up slides

Savings Potential – Stock Conversion

- Hypothetical conversion of global lighting stock (2010) from inefficient to efficient lamps:
  - Incandescent → CFL and LED
  - Linear Fluorescent → Efficient T8 and T5
  - High Intensity Discharge → Efficient Metal Halide
- Savings compares the energy consumption of stock inefficient vs. efficient lamps
- Global **electricity for lighting** was over**15%** of total electricity consumption in the baseline
- Switching to efficient stock would **save nearly** **40%** **of lighting electricity consumption**

Global Benefits of Stock Conversion

Reduction of **1044 TWh** of electricity; equal to annual electricity consumption of:

Electricity savings capacity could electrify **1 billion households**

Over **US$120 billion** annually in avoided electricity bills

Avoid over **US$230 billion** investment tied up in **280** large base-load coal-fired power plants

Compact Fluorescent Lamp

Savings of over **530 million tonnes** of CO_2 yearly; equal to annual CO_2 emissions of:

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Global Benefits of Stock Conversion to 100% LED

Reduction of **1550 TWh** of electricity; equal to annual electricity consumption of:

Electricity savings could electrify **1.5 billion households**

Over **US$175 billion** annually in avoided electricity bills

Avoid over **US$345 billion** investment tied up in **415** large base-load coal-fired power plants

LED Lamp

Savings of almost **800 million tonnes** of CO_2 yearly; more than the annual CO_2 emissions of:

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