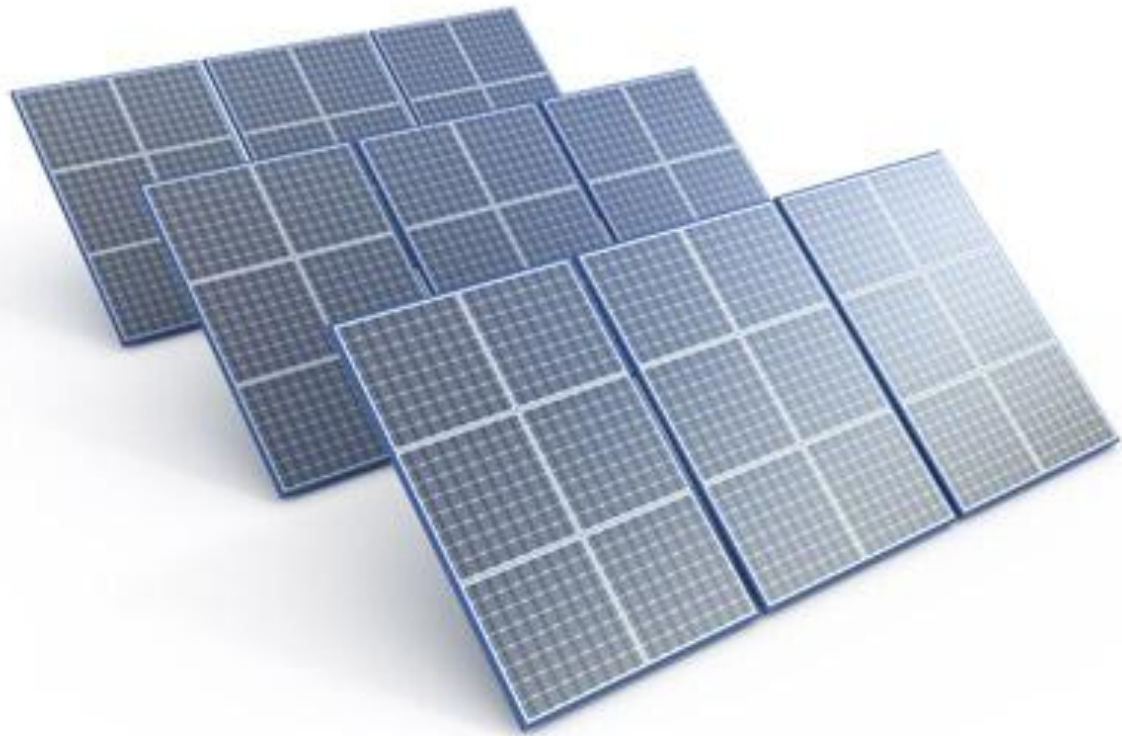




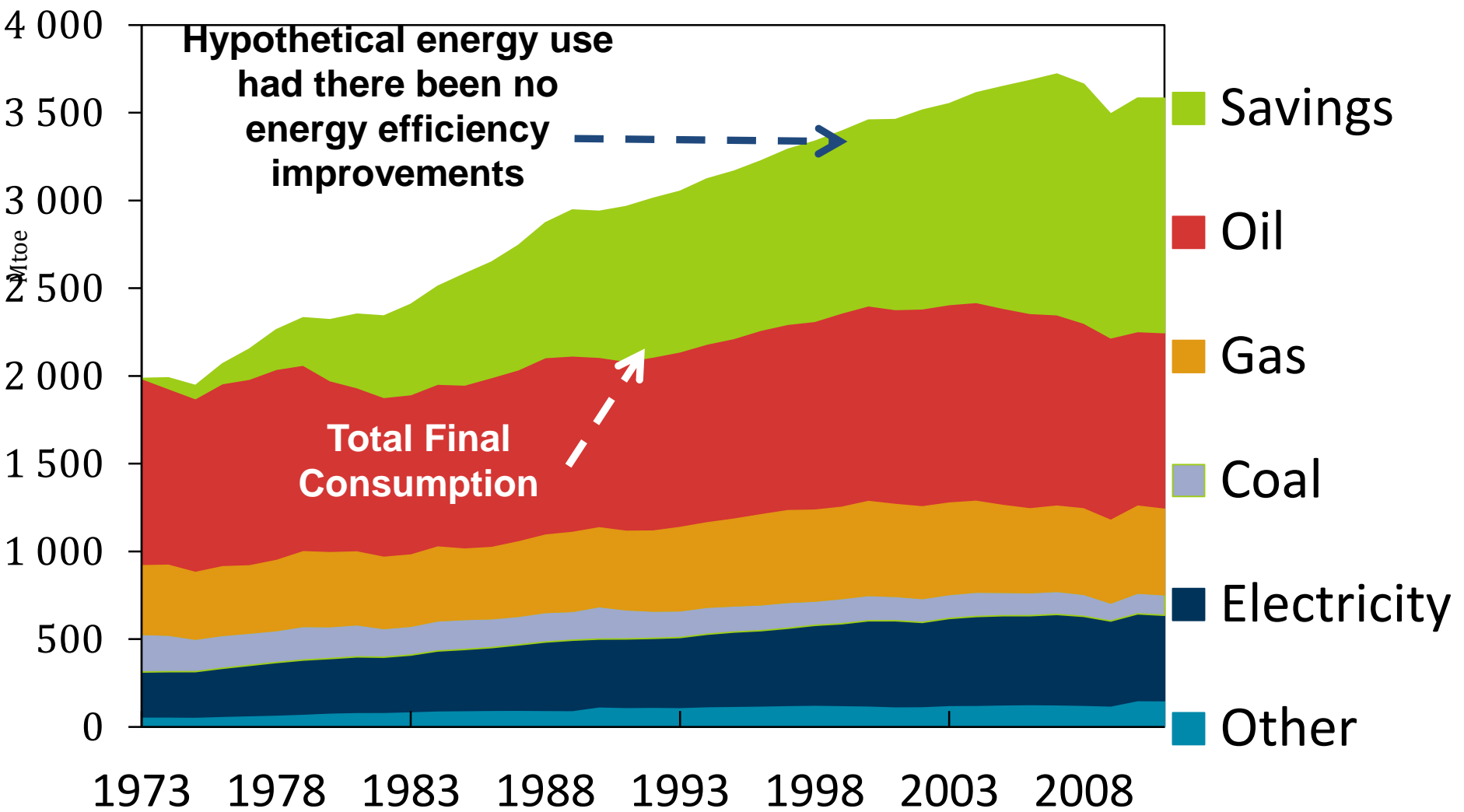
International Contexte and Financial needs for energy efficiency

EE Seminario OLADE 2016, Montevideo
Benoit LEBOT, Executive Director





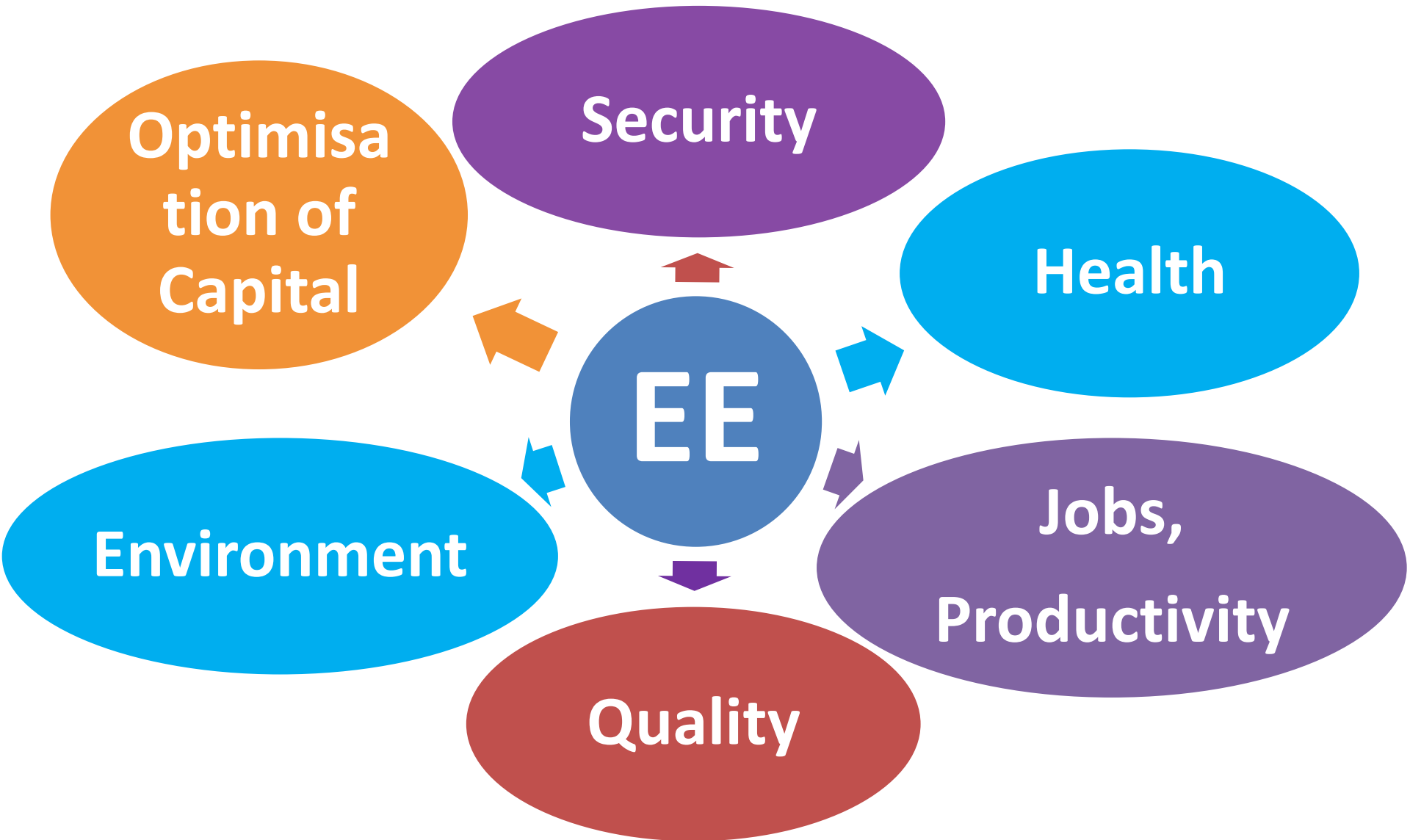
Energy Efficiency – The 1st Fuel



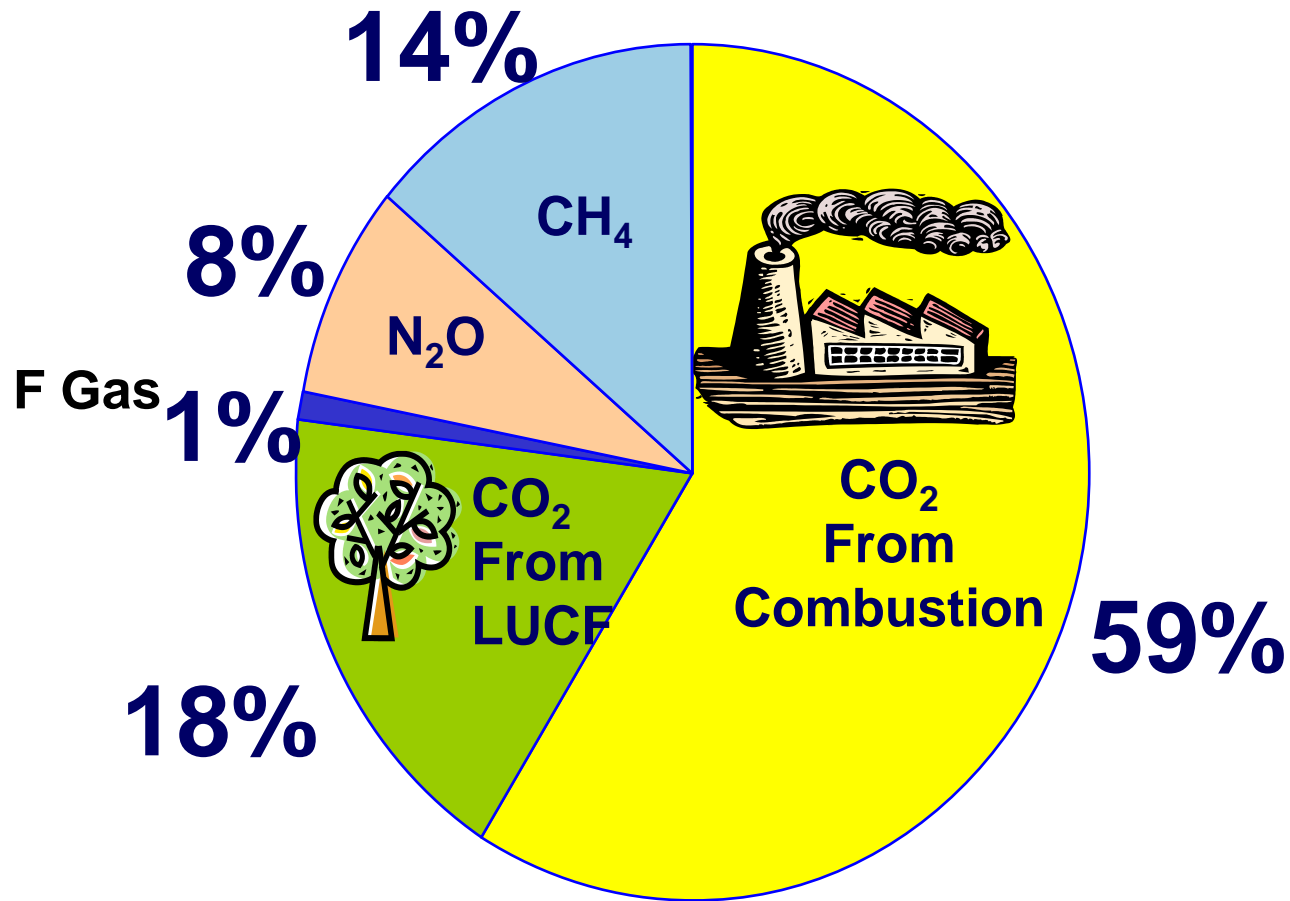
*IEA-11: Australia, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Sweden, United Kingdom, United States

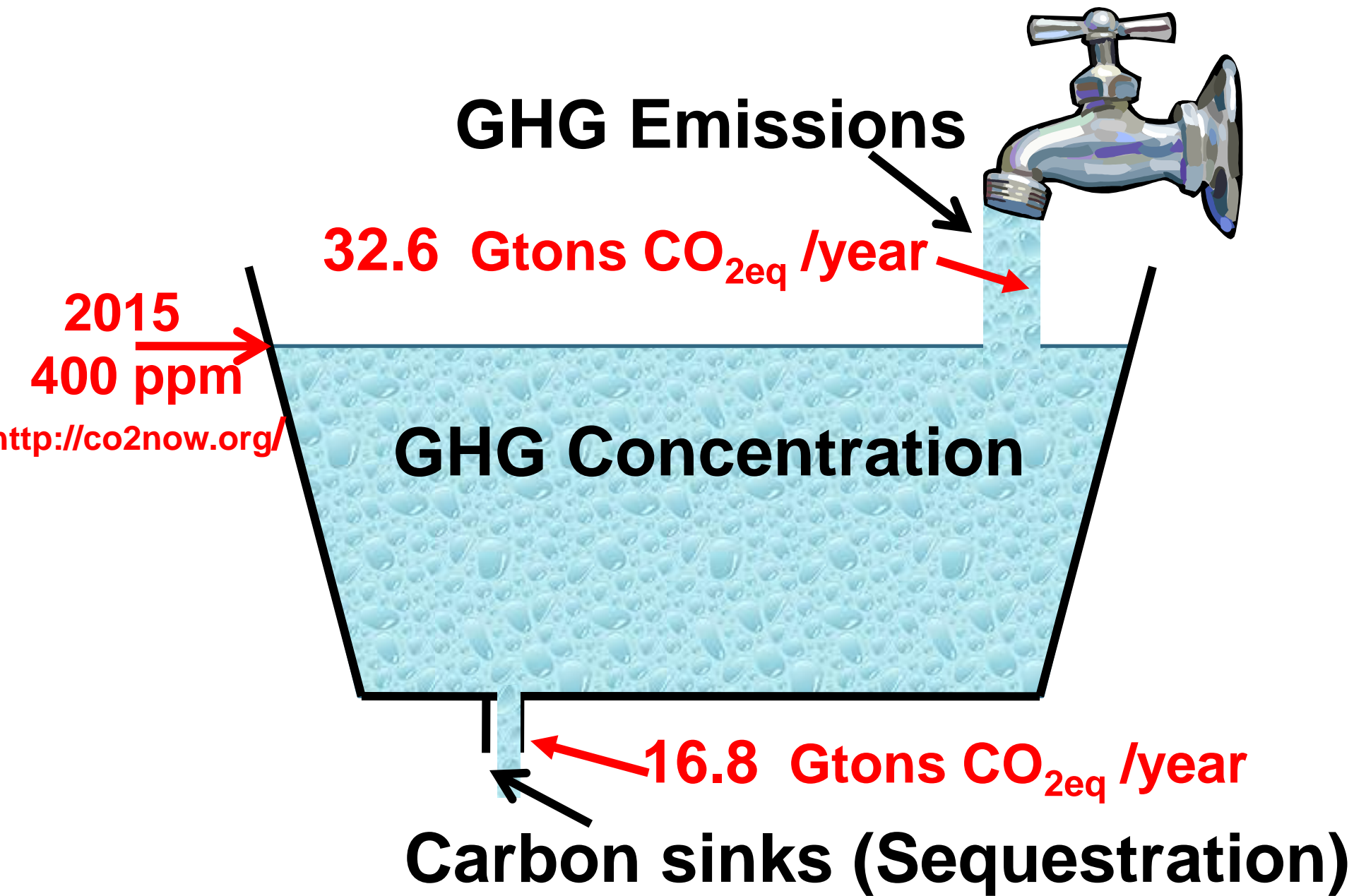
Source: IEA, Energy Efficiency Market Report 2014

Multiple Benefits of Energy Efficiency

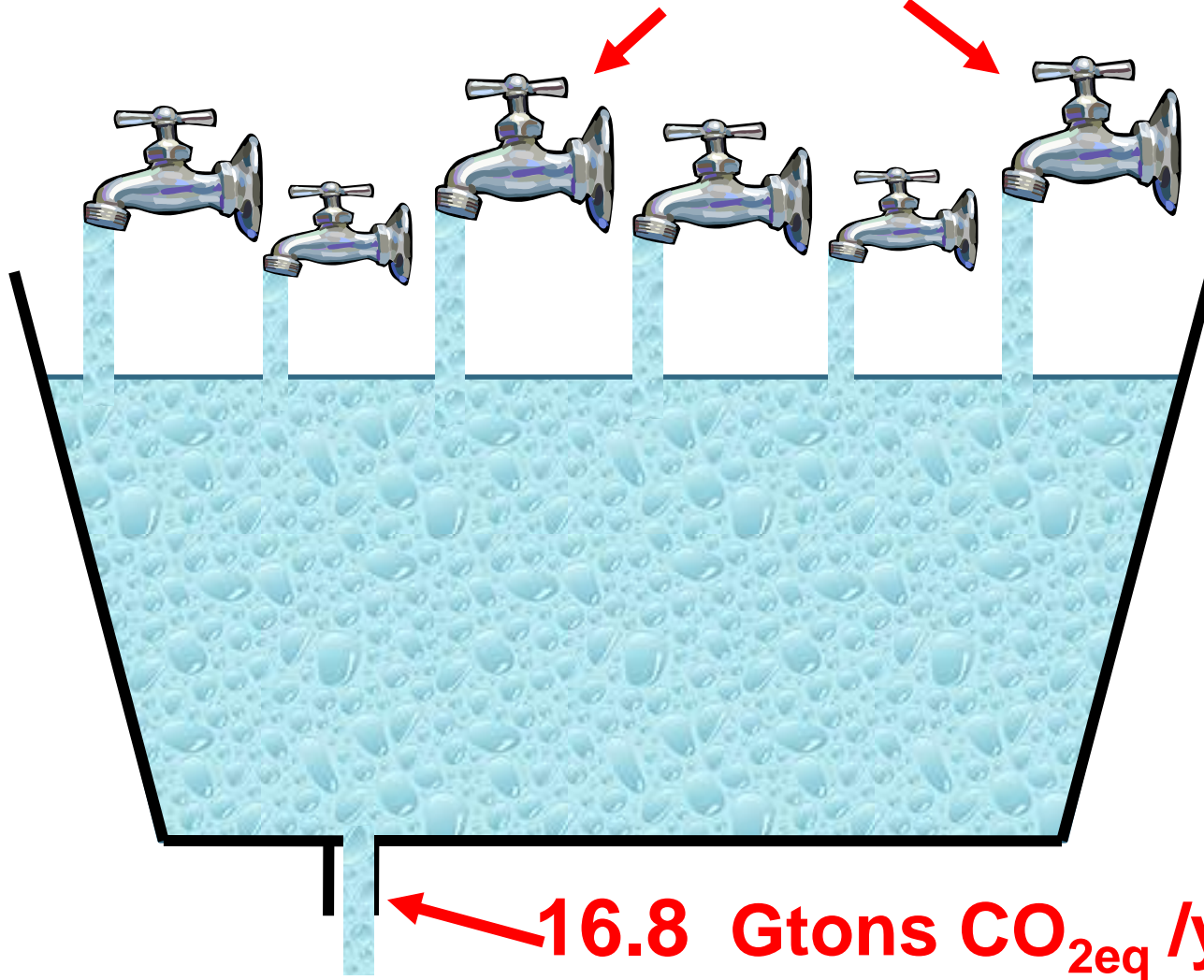


World Green House Gas Emissions

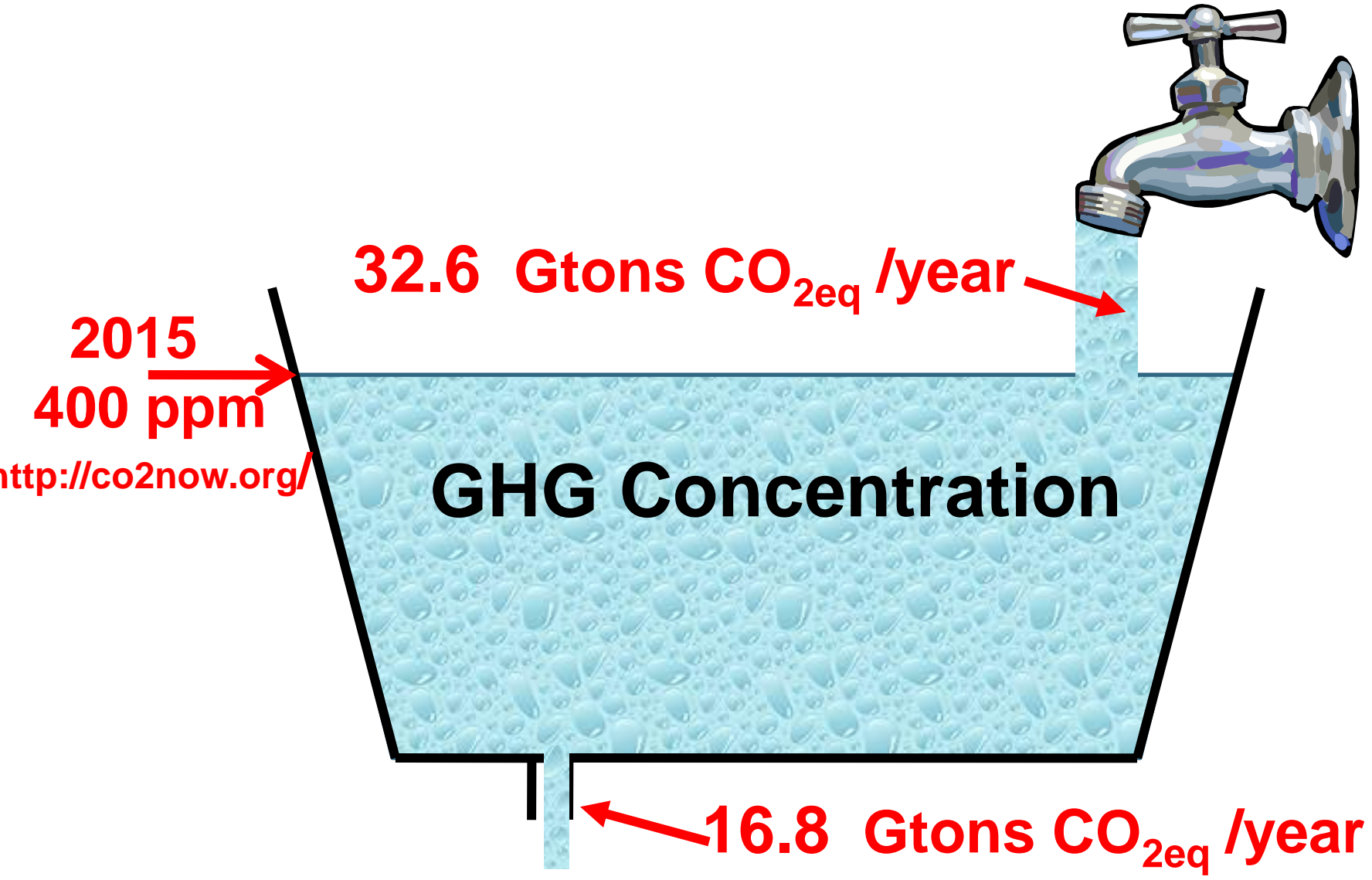


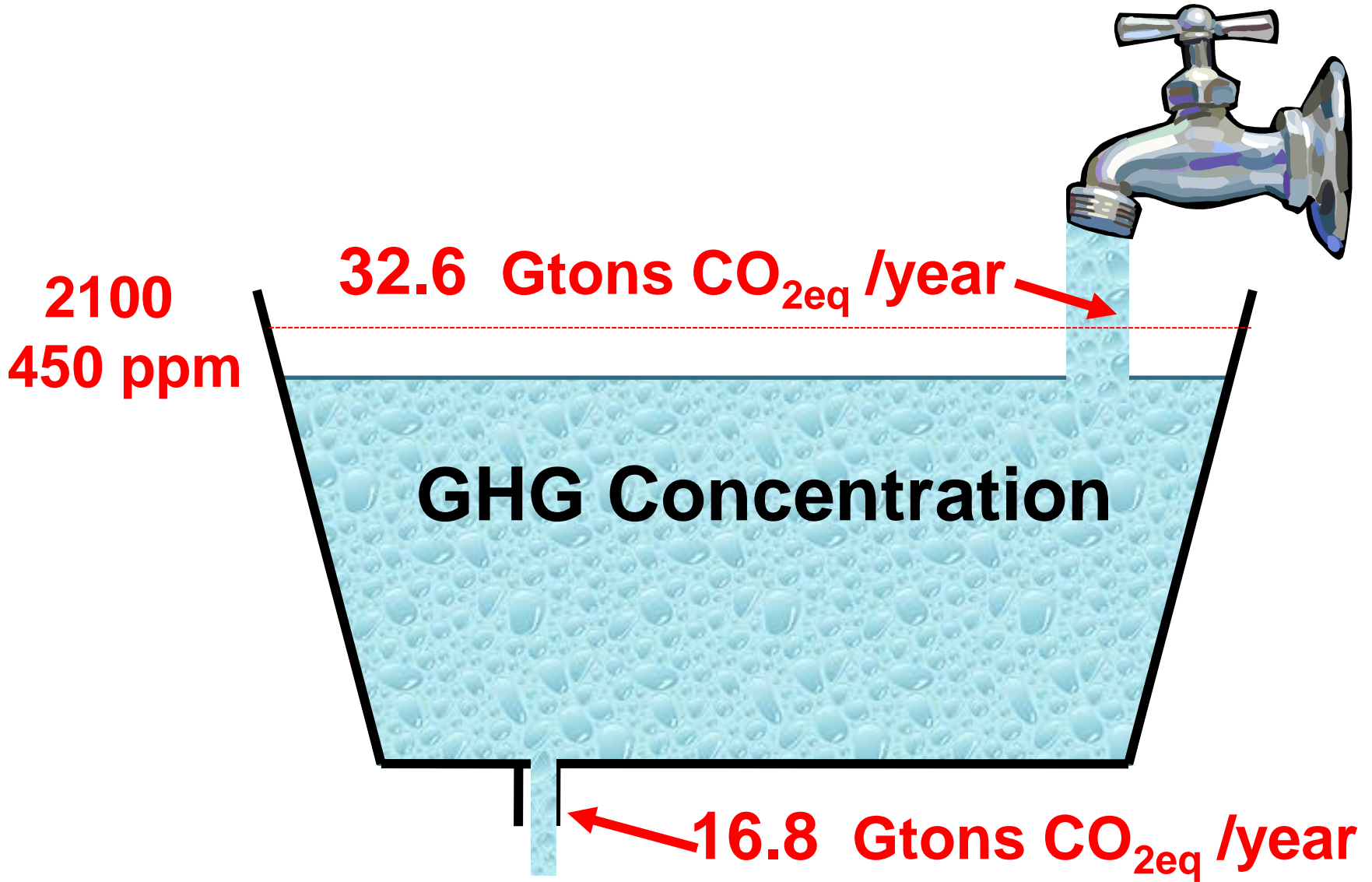


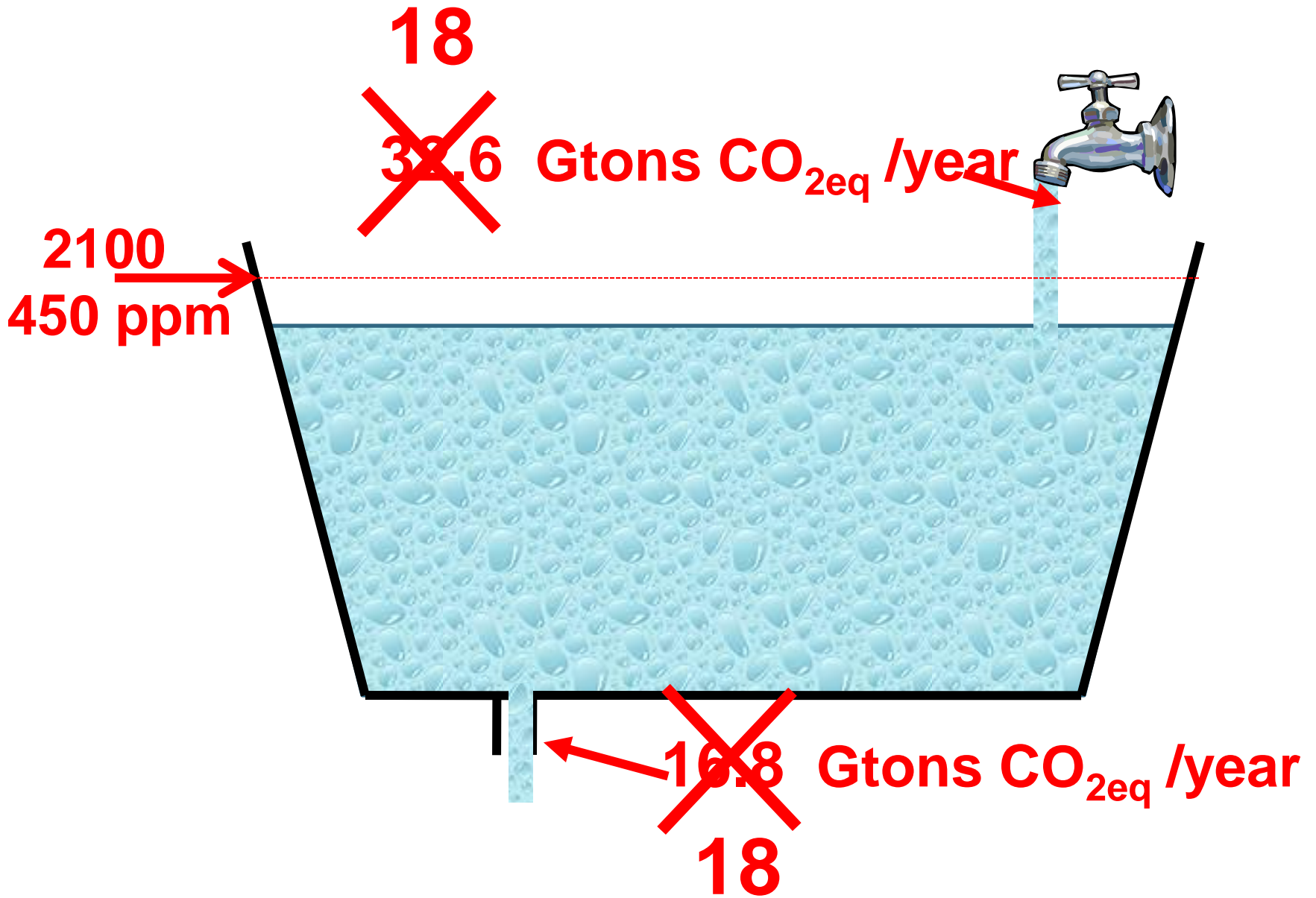
32.6 Gtons CO_{2eq} /year



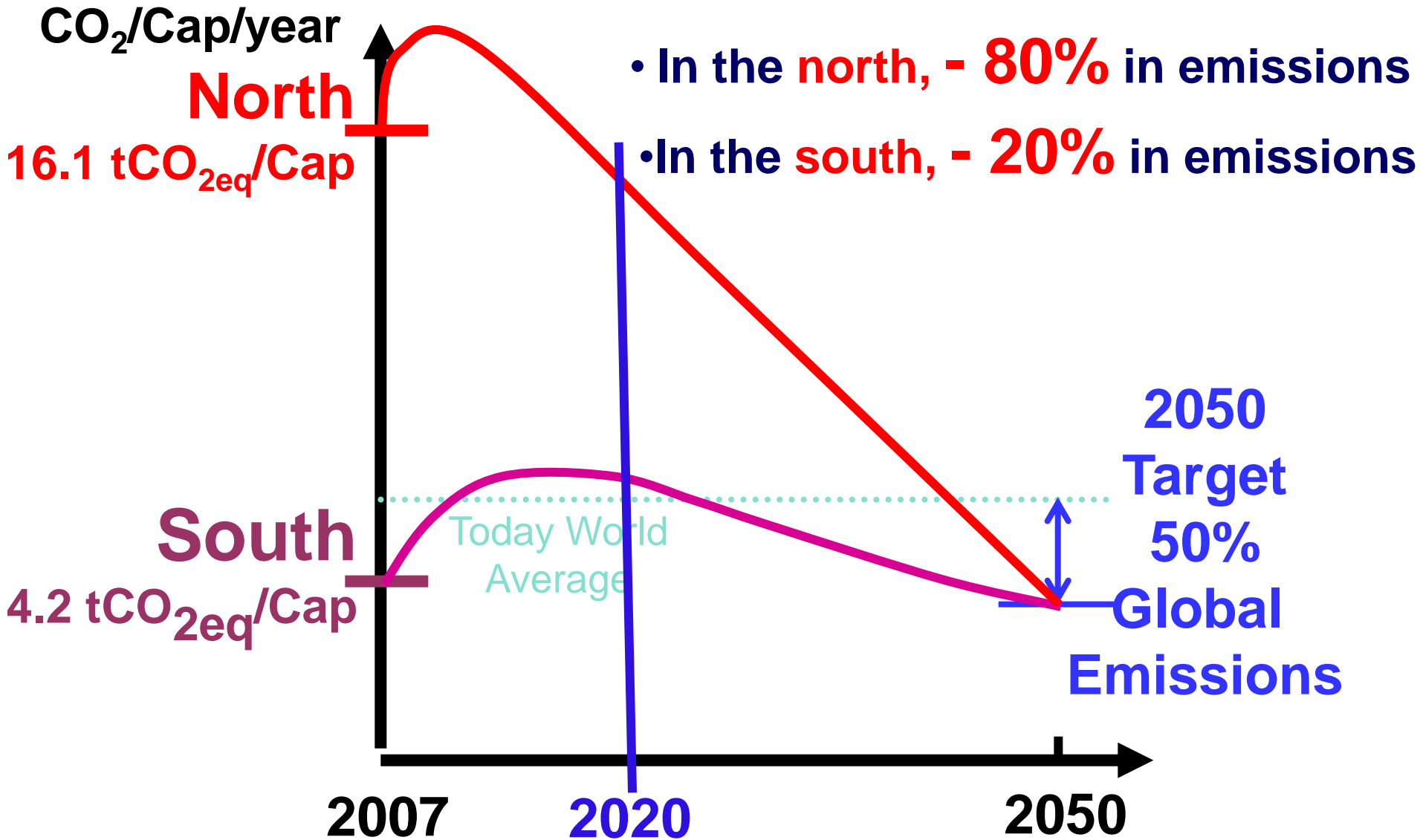
16.8 Gtons CO_{2eq} /year



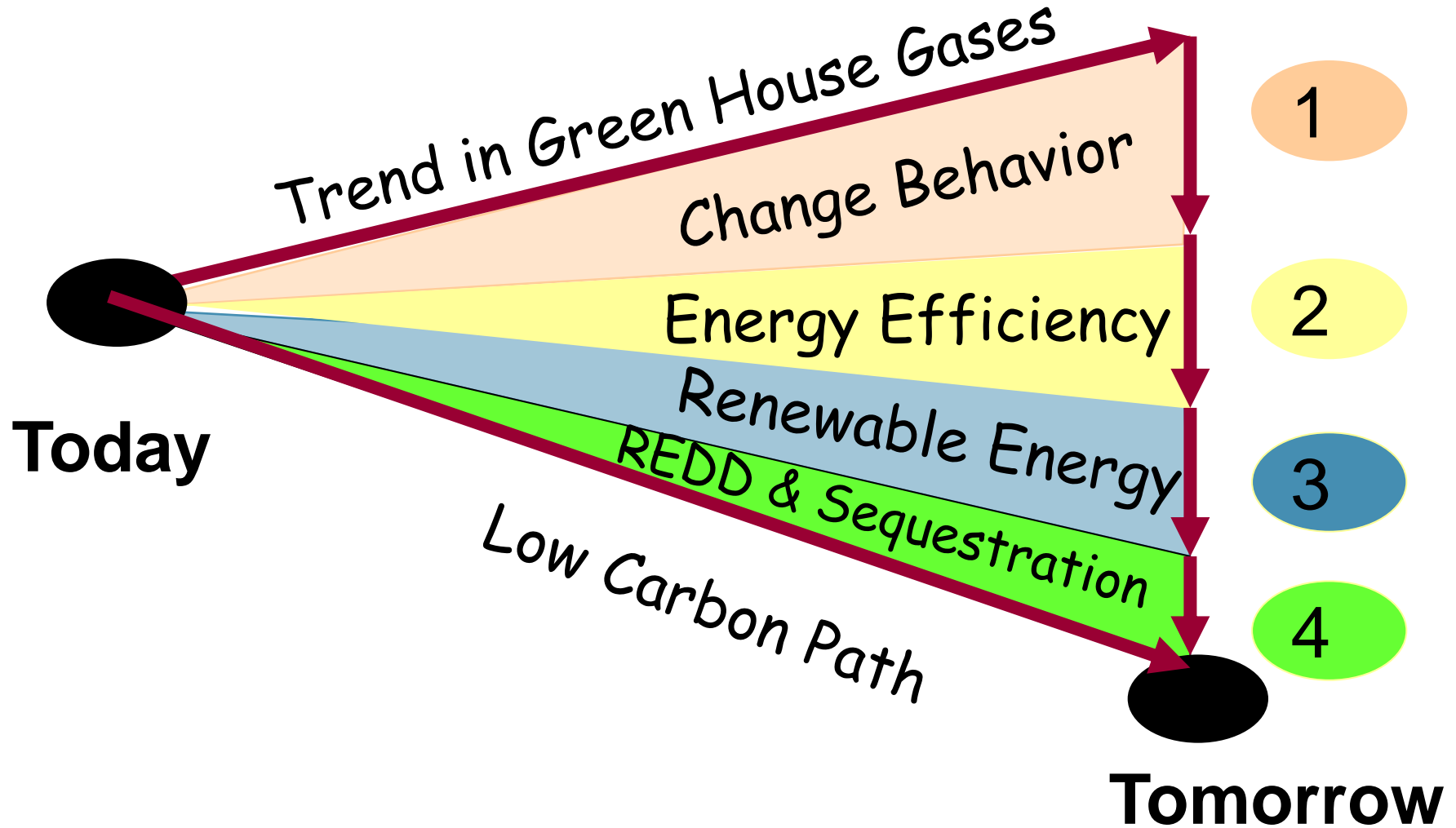




Pathway towards a 2° C Global Warming

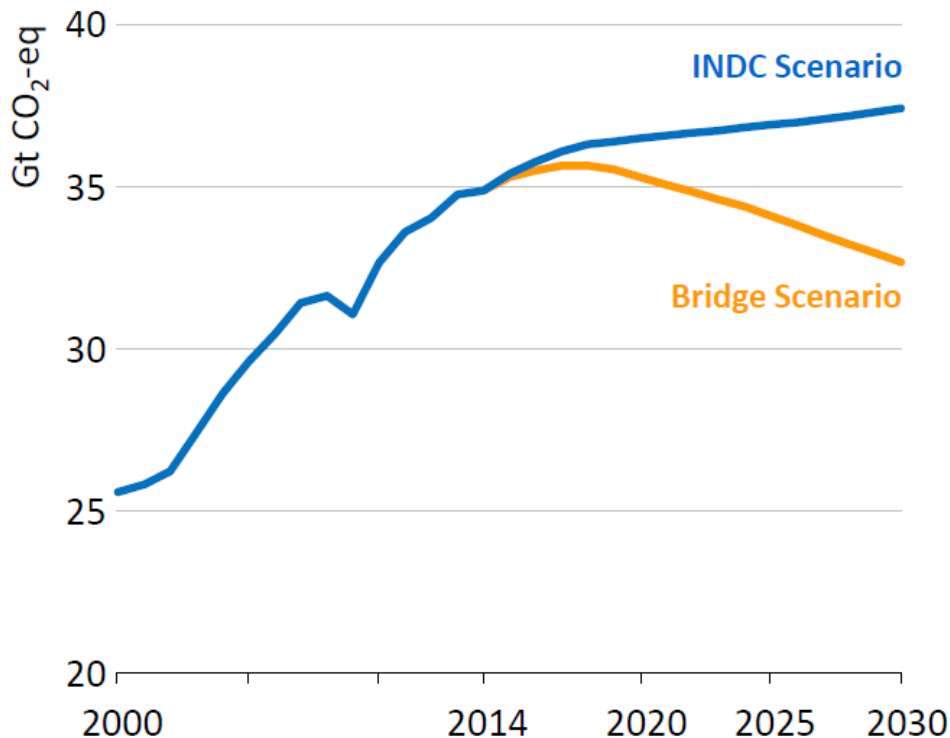


Four wedges for a low carbon development

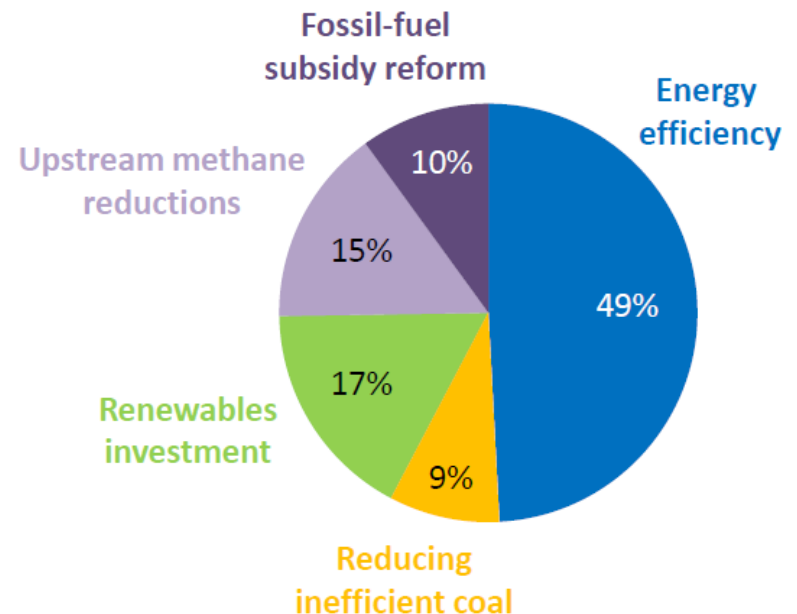


Energy Efficiency #1 in GHG Mitigation

Global energy-related GHG emissions



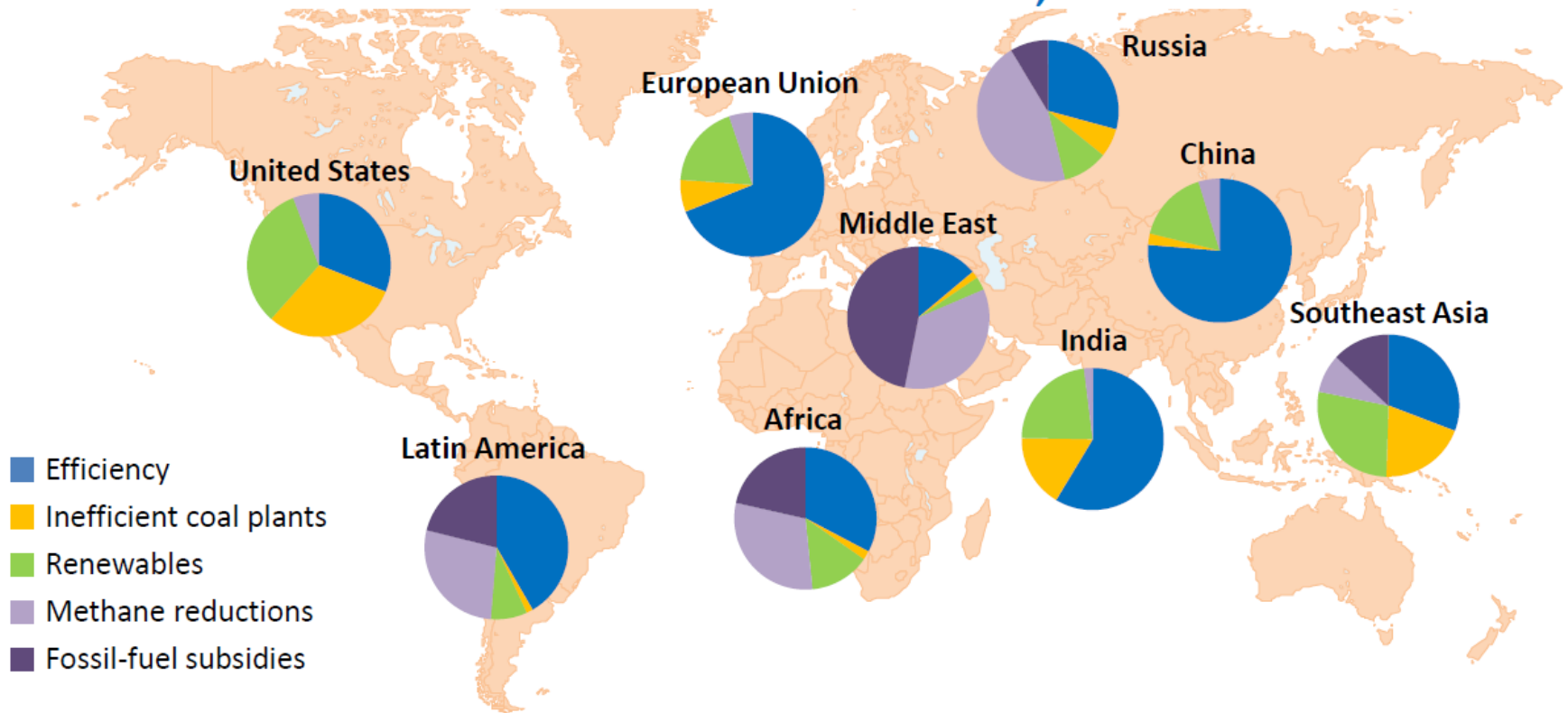
Savings by measure, 2030



Five measures – shown in a “Bridge Scenario” – achieve a peak in emissions around 2020, using only proven technologies & without harming economic growth

Energy Efficiency #1 in GHG Mitigation

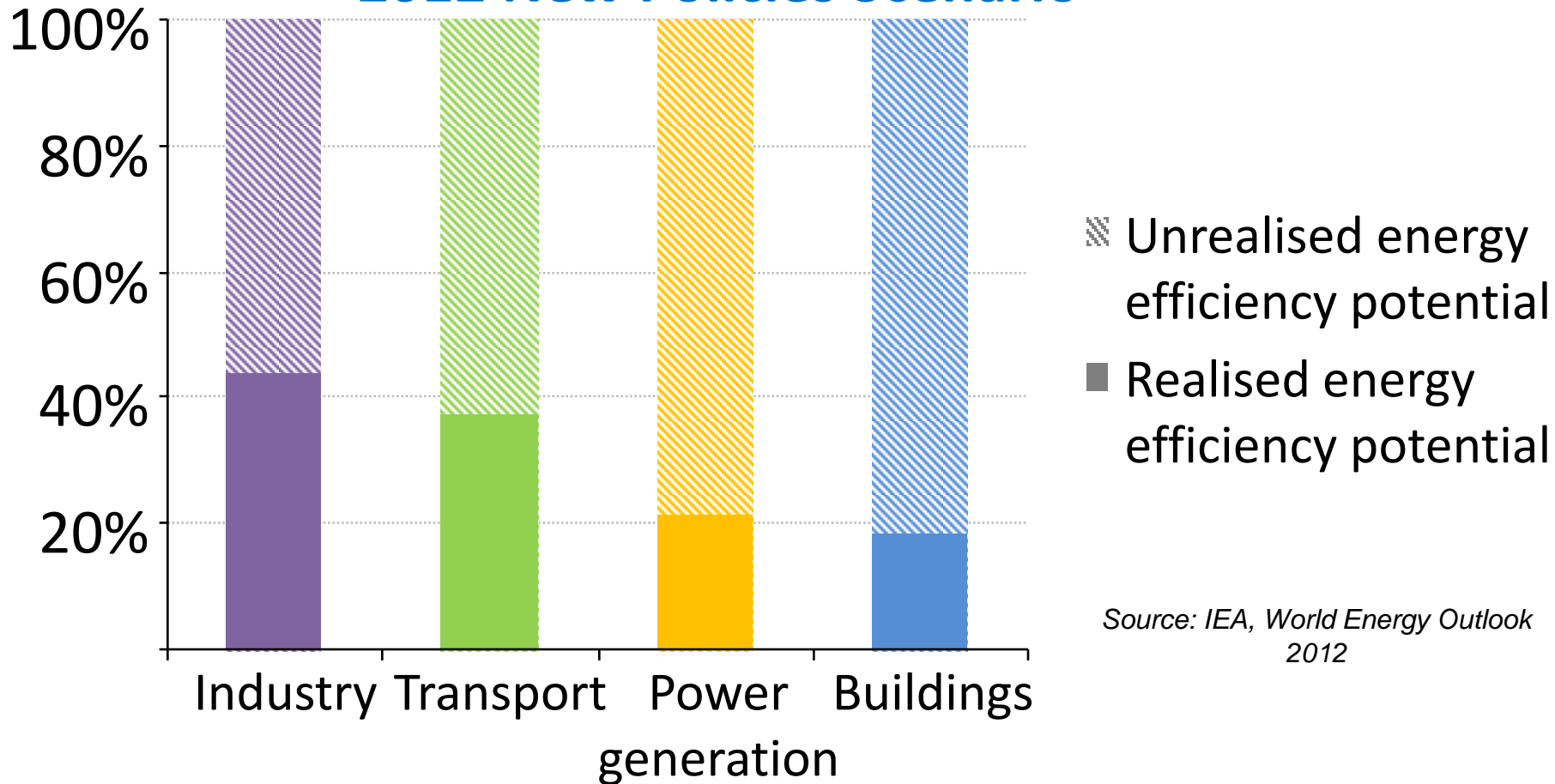
GHG emissions reduction by measure in the Bridge Scenario, relative to the INDC Scenario, 2030



The measures in the Bridge Scenario apply flexibly across regions, with energy efficiency and renewables as key measures worldwide

Energy efficiency potential remains untapped

Energy efficiency potential used by sector in the WEO 2012 New Policies Scenario

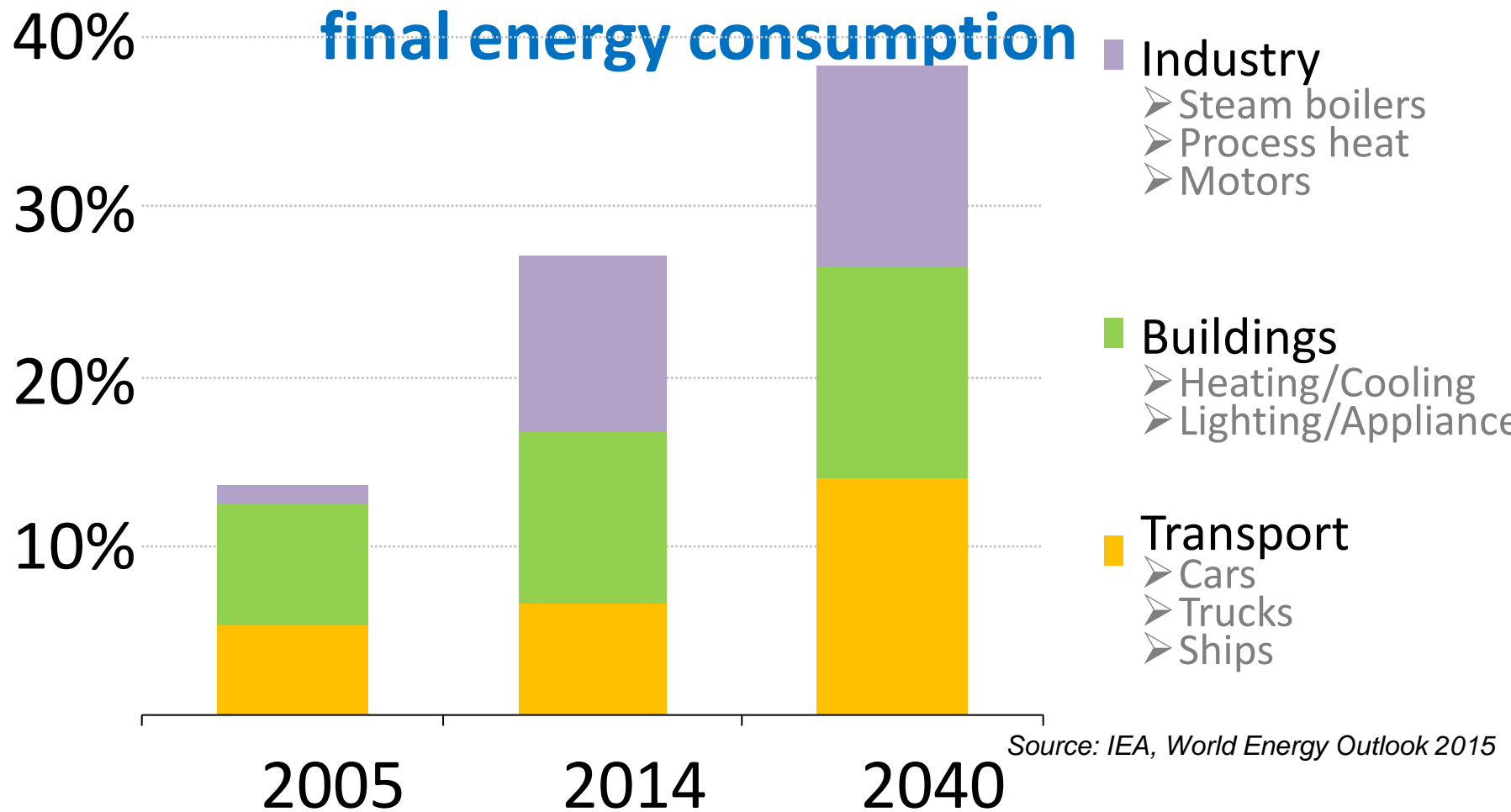


Source: IEA, World Energy Outlook 2012

Two-thirds of the profitable investments to improve energy efficiency remain untapped in the period to 2035

Efficiency measures on the rise, but significant potential still exists

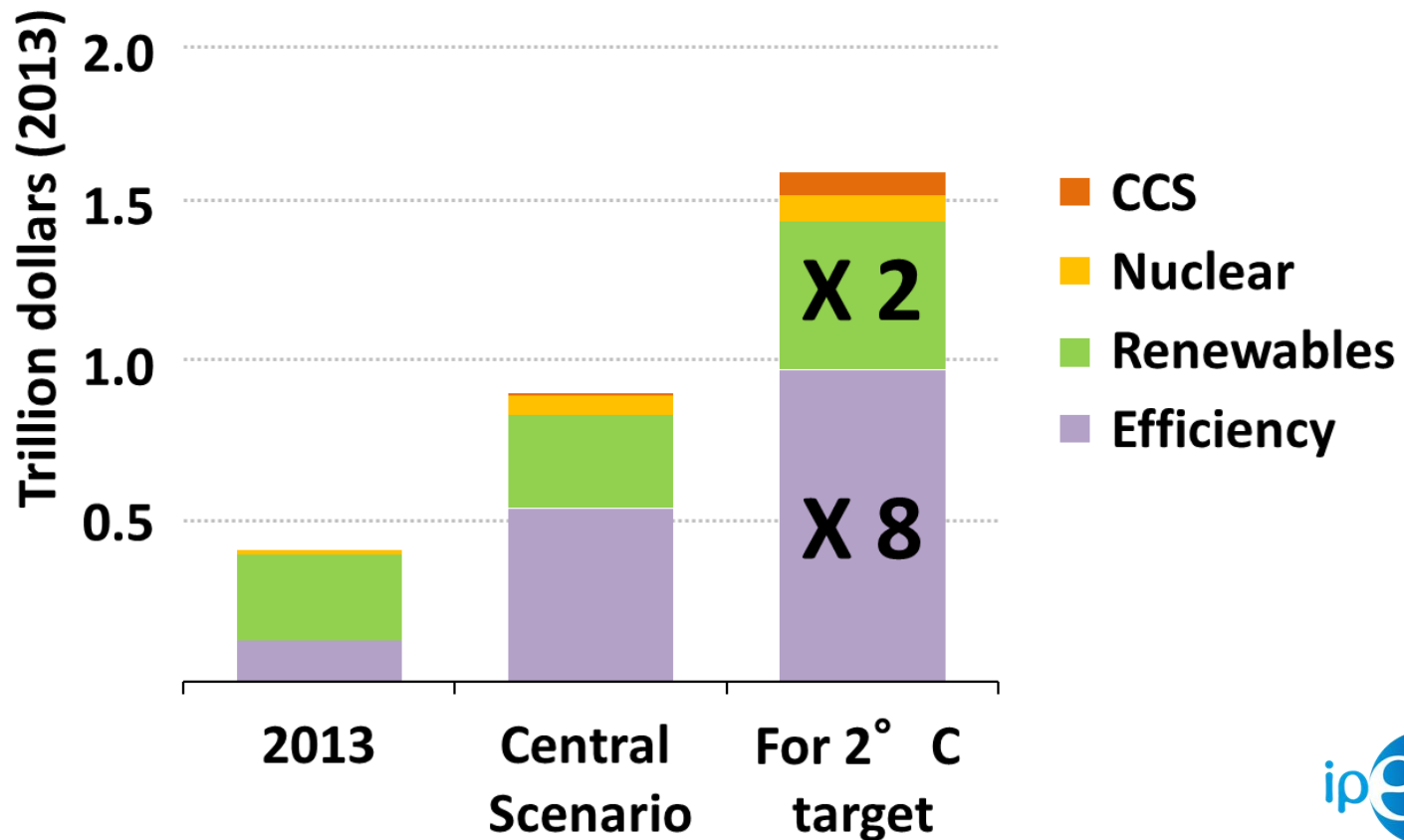
Share of global mandatory efficiency regulation of final energy consumption



Energy efficiency policies are introduced in more countries and sectors; they continue to slow demand growth but more can be done

...and the \$\$\$ needed

Average annual low-carbon investment, 2014-2040





International
Partnership for
Energy Efficiency
Cooperation

<http://www.ipeec.org/>

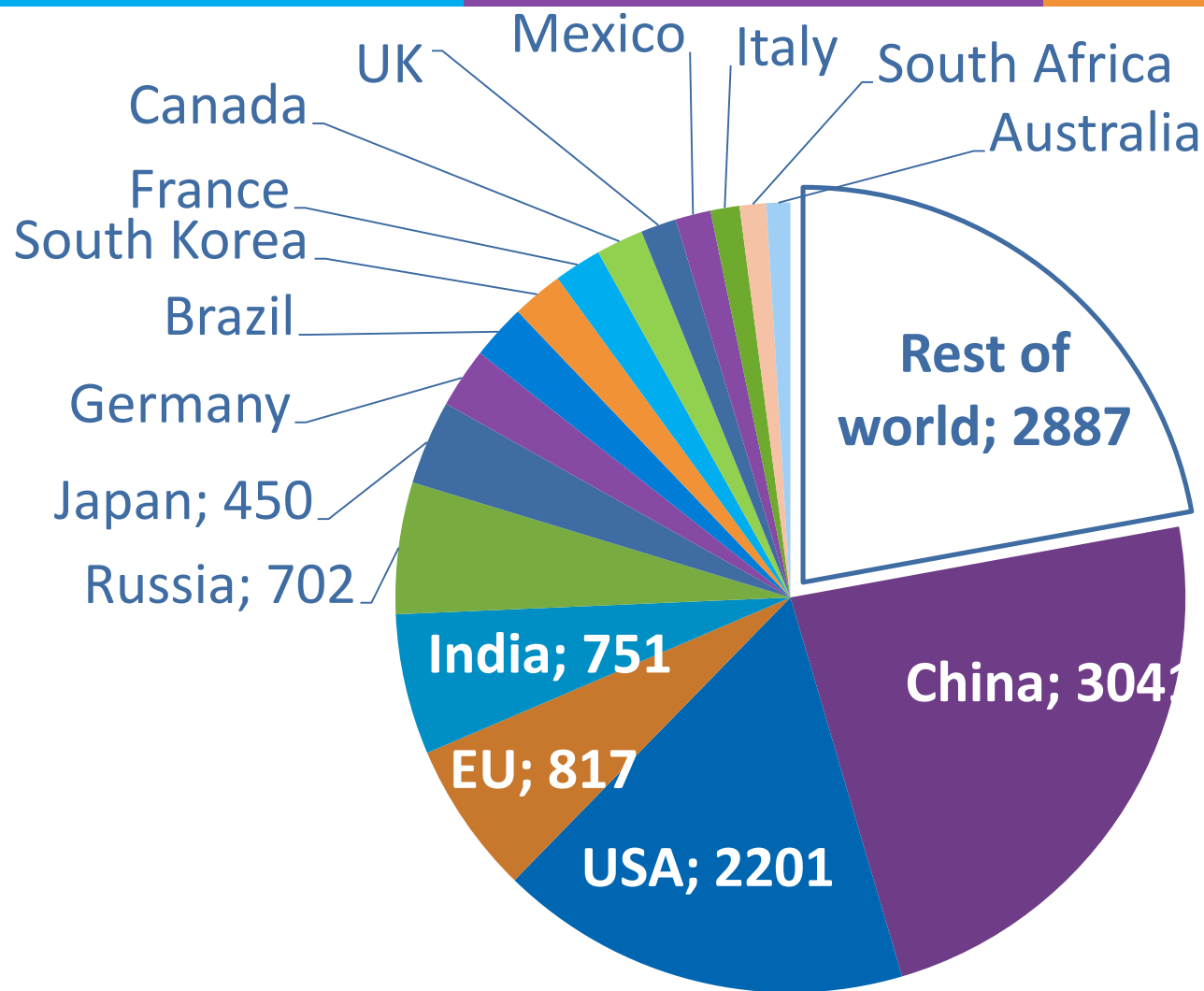
Why the G20?



IPEEC Members are Major Economies



IPEEC Member Countries weight >75% of World Energy Consumption

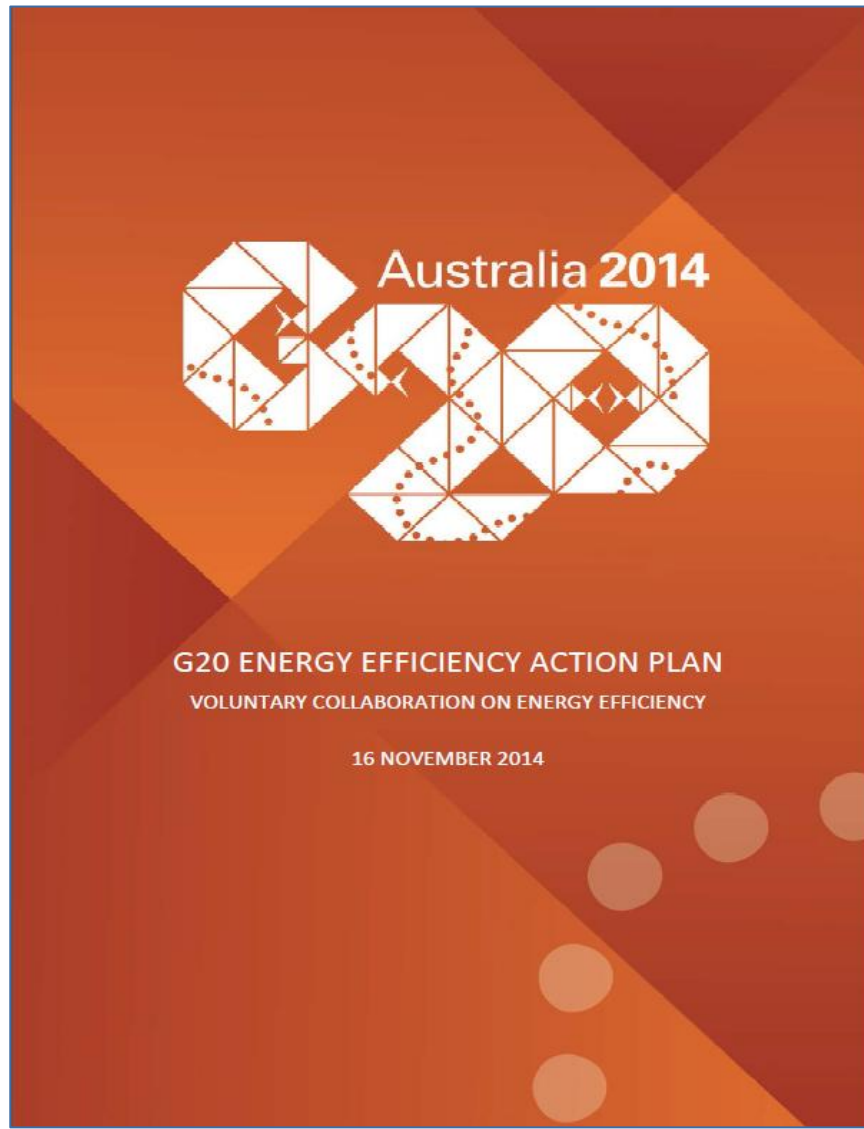


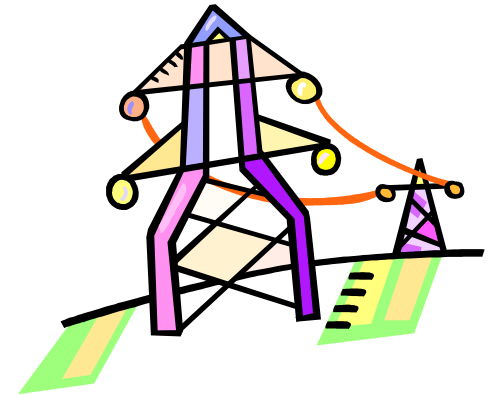
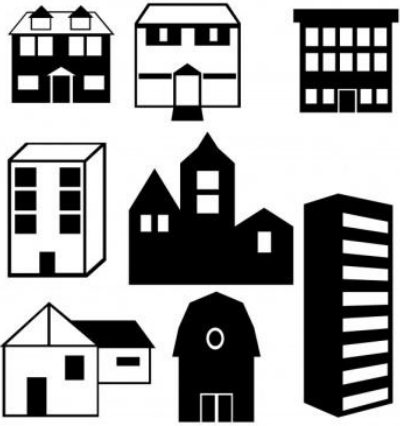
Global Energy Consumption (Source: IPEEI)

IPEEC's Vision

A world where key national policy makers view energy efficiency (EE) as a resource and implement cost effective policies to promote it.

The G20 Energy Efficiency Action Plan





Two major financial flows are needed:

1. Financing EE Enabling Environment

2. Scale up of EE Investments

Proposed Energy Efficiency Investment Principles I

1. **Recognise** Importance of Energy Efficiency as an Economic and Development Priority.
2. Encourage countries to consider both supply and demand side investments in a **balanced way**

Proposed Energy Efficiency Investment Principles II

3. Country-level review of measures and policies that **stimulate demand** for energy efficiency investments
4. Collaboration to unlock barriers that prevent the **supply of finance** for energy efficiency investments

Proposed Energy Efficiency Investment Principles III

5. **Build Capacity** within Public and Private Financial Institutions for Energy Efficiency Investments.

G20 Energy Efficiency & Finance

Regulations and their stability
are the key drivers for the
demand of and the supply for
energy efficiency investments

Achievements from G20 EE & Finance

Energy
Efficiency
Principles

Bank
Declaration
of Intent
on Energy
Efficiency

G20
Energy
Efficiency
Investor
Statement

\$4
Trillion of
assets

106
banks

Bank Statement on Energy Efficiency

- Channel finance
- Recognise opportunities
- Provide finance
- Scale up
- Track deployment
- Embed EE investment principles
- Guide clients
- Work together
- Share experience

Over 100 banks mobilized globally at COP21 to increase the financing of energy efficiency

- 
- ABN AMRO
 - ACBA - Credit Agricole Bank
 - ACCESSBANK
 - Agjencioni Per Financim NE Kosove
 - AKBank
 - Ameriabank
 - Armswissbank
 - ASN Bank
 - Bai Tushum & Partners
 - Banamex
 - Banca Transilvania
 - Bancolumbia
 - Bancompartir
 - Bank Eskhata
 - Bank Millennium
 - Bank of Georgia
 - Bank of India
 - Bank of Valletta
 - Bank Republic
 - Basisbank
 - BBVA
 - Belgazprombank
 - Belvneshconombank
 - BMCE Bank of Africa
 - BNP Paribas
 - Bpifrance
 - BPS-SBERBank
 - BRAC Bank Limited
 - BRD - Groupe Societe Generale
 - CASA DE Economii SI Consemnatiuni
 - CenterInvest Bank
 - CIBanco
 - Connecticut Green Bank
 - Crédit Agricole
 - Crédit Coopératif
 - Crédit Foncier
 - CREDO
 - Daegu Bank
 - Demir Kyrgyz International Bank
 - Demirbank
 - DenizBank
 - Desjardins Group
 - Ecobank
 - Erste & Steiermarkische Bank
 - Eurobank
 - Firststrand
 - Garanti Bankasi
 - Garanti Leasing
 - Halkbank Skopje
 - Hana Bank
 - HSBC Bank Armenia
 - Humo MDO
 - IDLC Finance Limited
 - Imon International
 - Industrial Bank
 - ING Group
 - Kyrgyz Investment and Credit Bank
 - La Banque Postale
 - Megabank
 - Microinvest
 - Minsk Transit Bank
 - Mobiasbanca
 - Moldincombank
 - Moldova Agroindbank
 - Mutualista Pichincha
 - National Bank of Egypt
 - NLB Tutunska Banka A.D. Skopje
 - NRW Bank
 - Ohridska Banka A.D. Ohrid
 - OTP Bank Romania
 - Pireaus Bank
 - Procredit Group
 - Raiffeisen Bank Aval
 - Raiffeisen Bank D.D. Bosnia and Herzegovina
 - Raiffeisen Bank Romania
 - SEF International Universal Credit Organization
 - Şekerbank
 - Shinhan Bank
 - Slovenska Sporitelna
 - Societe Generale Group
 - Societe Generale Banka AD Beograd
 - State Export Import Bank of Ukraine
 - Sudameris Bank
 - Sumitomo Mitsui Trust Holdings
 - Tatra banka
 - Triodos Bank
 - TuranBank
 - Türkiye İş Bankası
 - Türkiye Sinai Kalkinma Bankasi
 - UK Green Investment Bank
 - Ukrsibbank
 - Unibank
 - Unicredit Bank DD Mostar
 - Unicreditbank Serbia
 - Unicredit Bulbank
 - Unicredit Tiriac Banka
 - United Bulgarian Bank
 - Vakiflar Bankasi
 - VTB Georgia
 - Xac Bank
 - Yapı ve Kredi Bankasi
 - YES Bank
 - Zagrebicka Banka



European Bank
for Reconstruction and Development



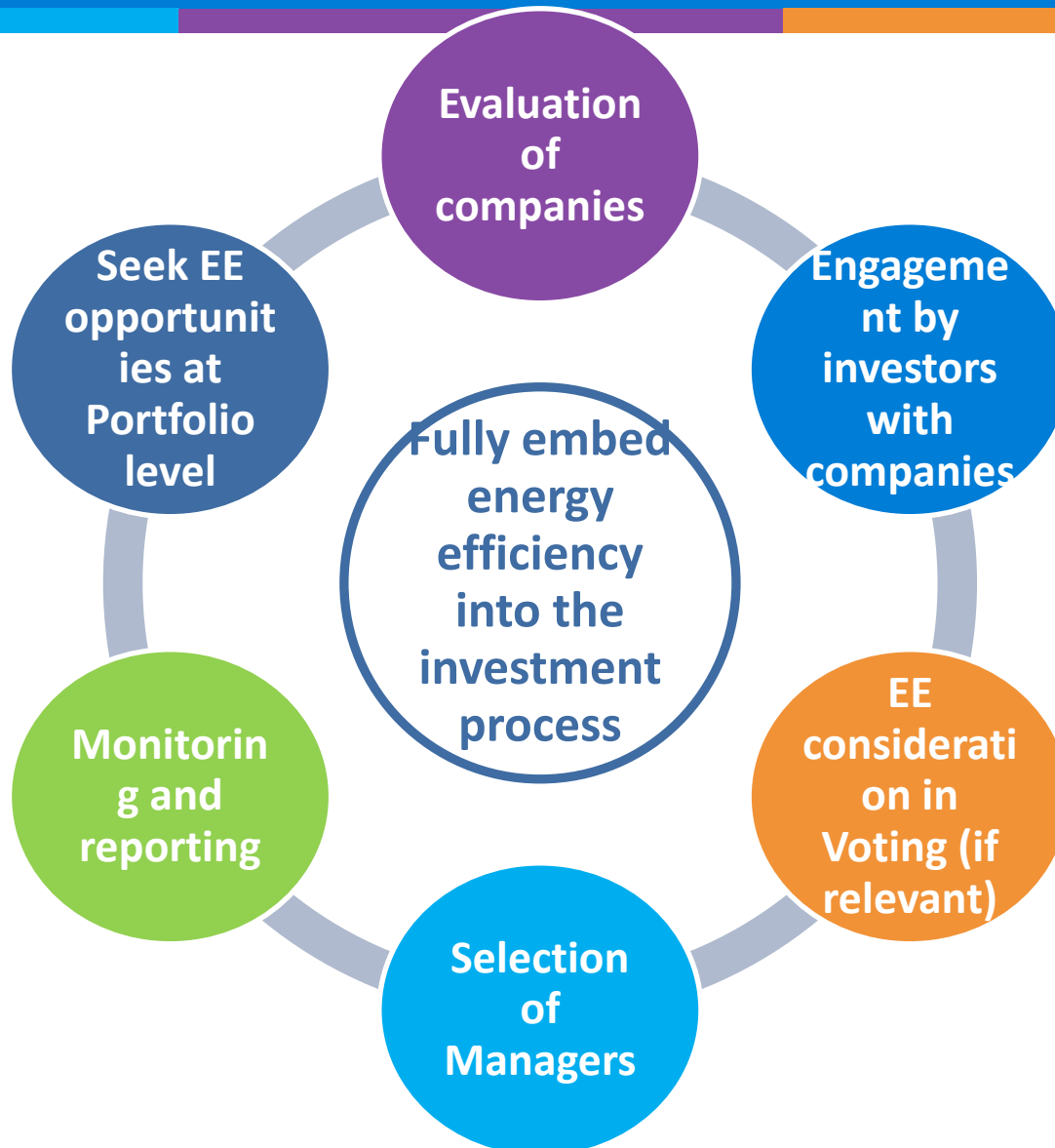
FINANCE
UNEP INITIATIVE

WE MUST
CAN
WILL



Lima-Paris Action Agenda

Energy Efficiency Investor Statement



Investors managing close to USD 4 trillion signed the Energy Efficiency Investor Statement

AFL-CIO

alecta

Amundi
ASSET MANAGEMENT

FÖRSTA AP-FONDEN

Andra AP-fonden
Second Swedish National Pension Fund - AP2

AP3 Tredje AP-fonden

AP FJÄRDE AP-FONDEN
Fourth Swedish National Pension Fund



Sjätte AP-fonden

australianethical
superior. penultimate. investment.

AVIVA INVESTORS

AXA INVESTMENT MANAGERS

BOSTON COMMON
ASSET MANAGEMENT

GRUPE Caisse des Dépôts

CALSTRS
HOW WILL YOU SPEND YOUR FUTURE?

Calvert INVESTMENTS

CANDRIAM
INVESTORS GROUP
A NEW YORK LIFE COMPANY

cbus

Church of Sweden

ECOFI
INVESTISSEMENTS

Environment Agency Pension Fund

RFP
Retraite
obligatoire de la fonction
publique

First Affirmative
Financial Network, LLC

generation

Handelsbanken Asset Management

HERMES
INVESTMENT MANAGEMENT

Humanis
Protéger c'est s'engager

inflection point
CAPITAL MANAGEMENT

Southwark Council

mirova
Responsible Investing

NATIXIS
ASSET MANAGEMENT

PAXO
Pax World Management LLC

ROBECO
The Investment Engineers

sonen capital

storebrand spp

TORONTO ATMOSPHERIC FUND

TRILLIUM
ASSET MANAGEMENT

Triodos Investment Management

Walden Asset Management
Celebrating 40 Years of Integrity

WHEB Group

UNEP FINANCE INITIATIVE

PRI Principles for Responsible Investment

Ceres

WE MUST CAN WILL

Lima-Paris Action Agenda

Energy Efficiency Investor and Bank Statements

- **Remain open for additional signature to accompany the G20 work, and until COP22,**
- **2016: Increasing the number of institutions involved, and developing content**

Energy Efficiency needs access to:

1. Information
2. Technologies
3. Know how
4. Finance

Vision
Dedicated Staff
Work Plan

Conclusion: no longer an option

- All levels to be mobilized, in all economies;
- Significant public \$ is necessary on EE fundamentals, but returns are high
- Green Climate Funds could finance EE
- National versus local: experiment, validate, raise EE ambition
- International Cooperation can enhance the deployment of Energy Efficiency.

Thank You

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www.ipeec.org/EEFTG

Follow IPEEC on:



Ingredients of an ideal EE policy package 1

- **National Policy Framework** (EE law);
- **Dedicated human resources** (institutions or existing departments);
- **Dedicated financial resources;**

Ingredients of an ideal EE policy package 2

- **Energy Efficiency is not only an energy policy**
- **Set level playing field** (market price for energy, ruling utilities)
- **EE needs time and lots of patience...**

Ingredients for a ideal EE policy package 3

- Energy efficiency requires and consumes lots of data
- **Significant investments** is needed in data collection and analysis (setting the baseline)
- Governments to set metrics, data collection channels...

Ingredients for a ideal EE policy package 4

- **Energy bills reduction is just one of the benefits of energy efficiency**
- **Metrics & data collection to assess non energy benefits**
- **Energy Efficiency Targets**
- **Monitor progress: EE indicators**

Ingredients for a ideal EE policy package 5

- **Minimum Energy performance standards on equipment, systems & buildings**
- **Labeling, rating, certification, codes**
- **New construction & existing buildings**
- **Include energy in land use & urban development**



GIS, ITC, Big Data, BIM = great opportunities

Ingredients for a ideal EE policy package 6

- **Utility programs (DSM)**
- **Engage the finance community**
- **Set financial/fiscal measures**
- **MRV & Inspection scheme**

Ingredients for a ideal EE policy package 7

- **Permanent communication on all levels**
- **Mainstream EE in all line Ministries**
- **Good balance between National & Local implementation (experiment).**
- **When appropriate, line up with international or regional dynamics.**