Why do Energy Efficiency receive less government support than other energy policies?

By Benoit Lebot, Executive Director of the Secretariat the *International Partnerships for Energy Efficiency Cooperation*

ECEEE 2019

June 4th



Members

Australia
Argentina
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Canada
European Union
France
Germany
India
Italy
Japan
Mexico
People's Republic of China
Republic of Korea
Russian Federation
South Africa
United Kingdom
United States

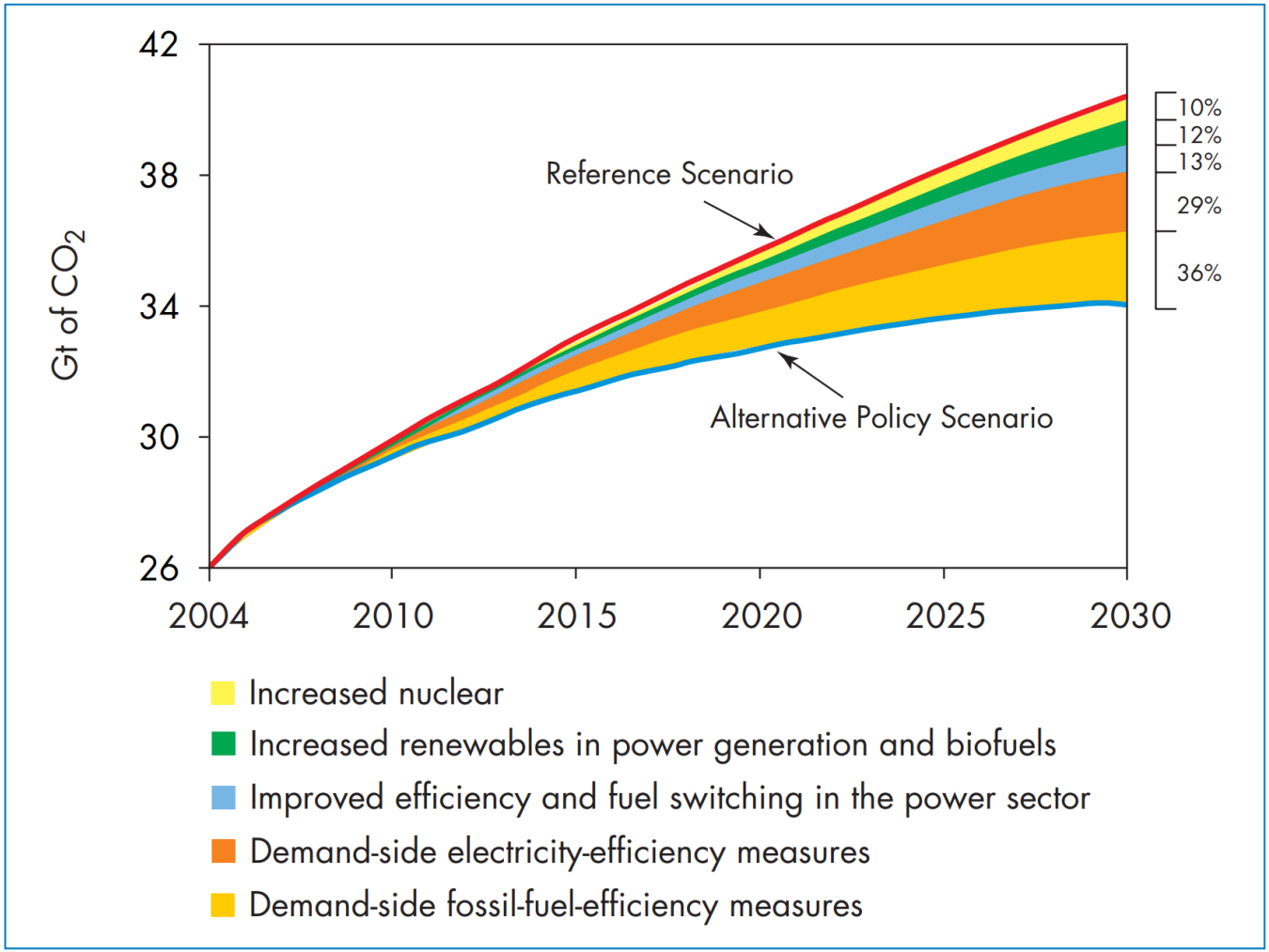
17 members of G20 Economies
Over **75%** of global energy use and **75%** of global GHG emissions

ipcc

It’s time to ‘fuel the first fuel’

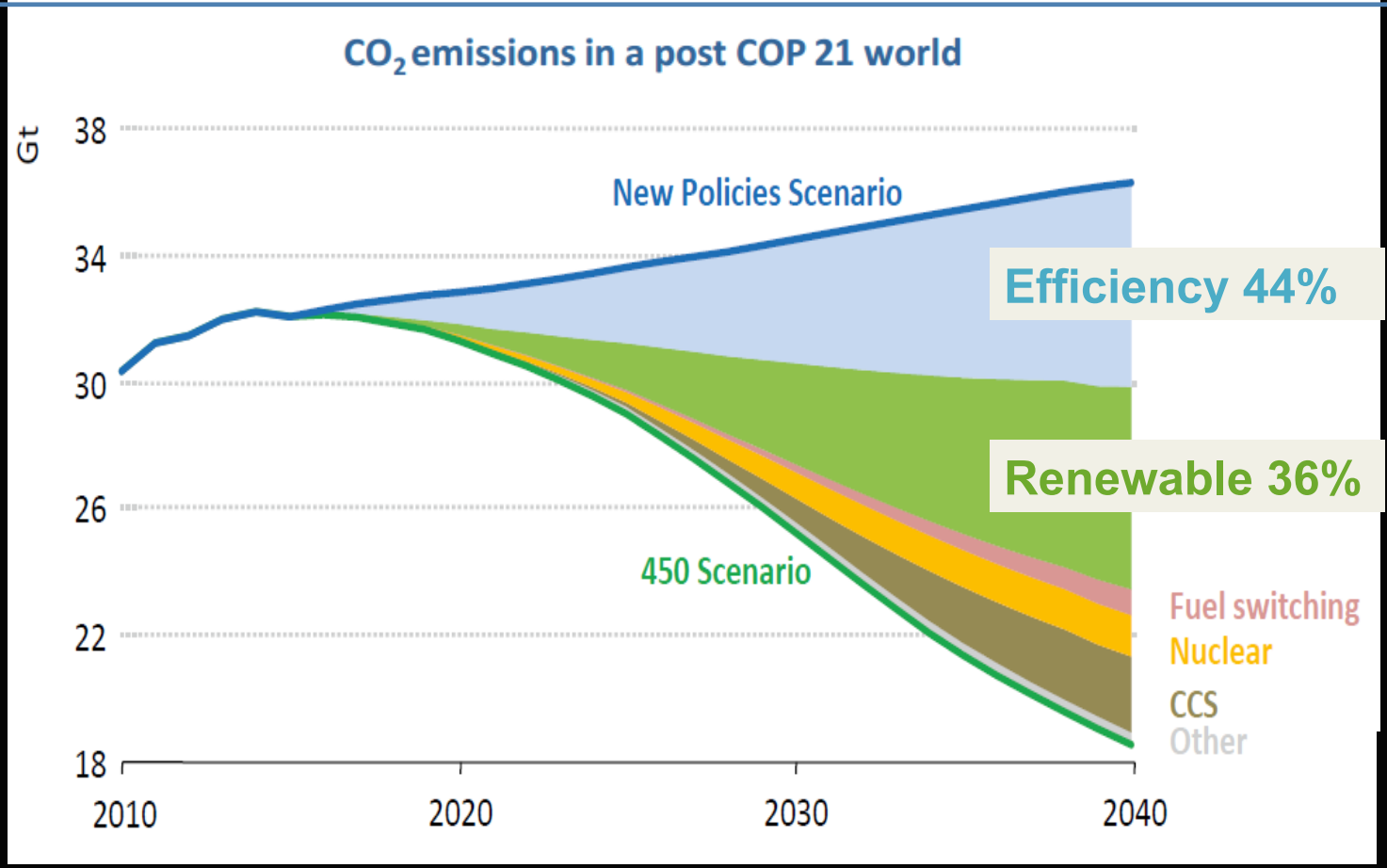


Figure 7.14: **Global Savings in CO_2 Emissions in the Alternative Policy Scenario Compared with the Reference Scenario**



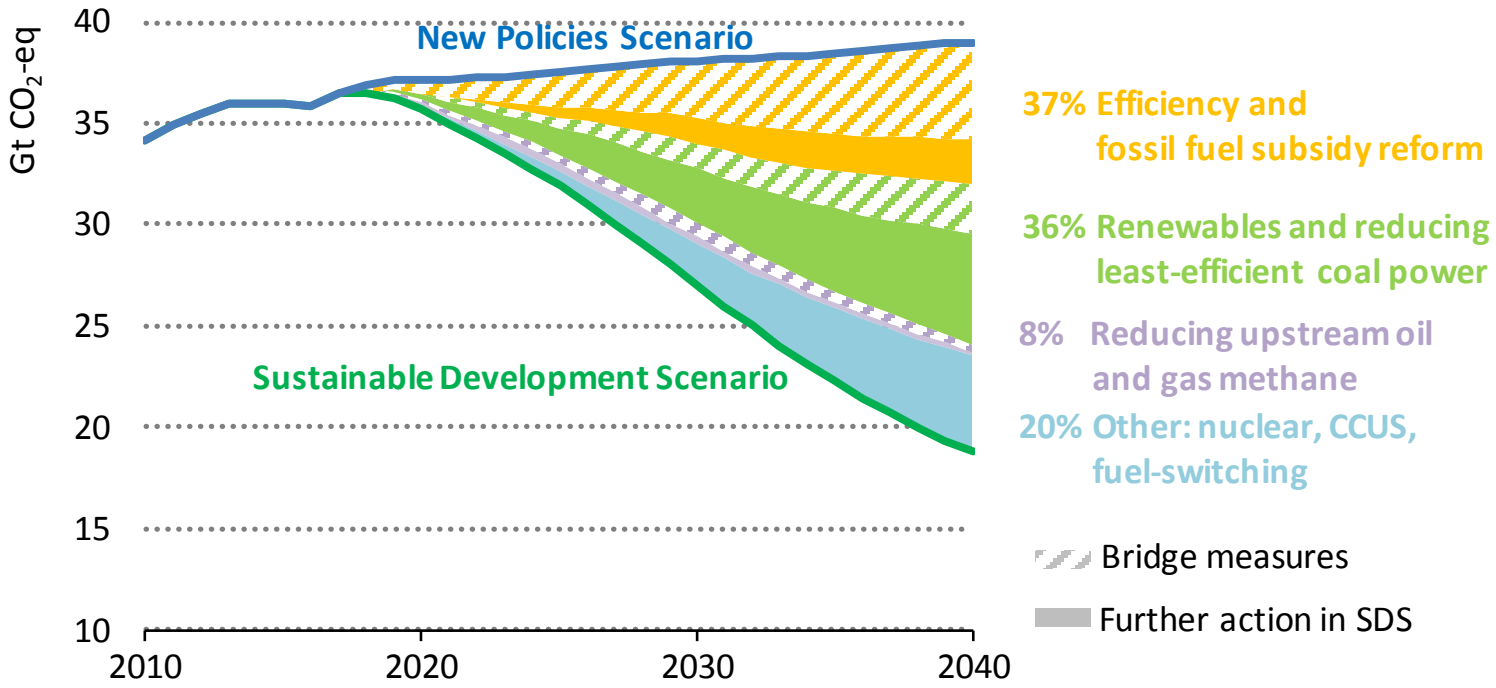
Source:
IEA WEO 2006

Energy Efficiency reduces GHG



*Source: IEA (2016)

CO_2 and methane emissions reductions by measure in the Sustainable Development Scenario relative to the NPS

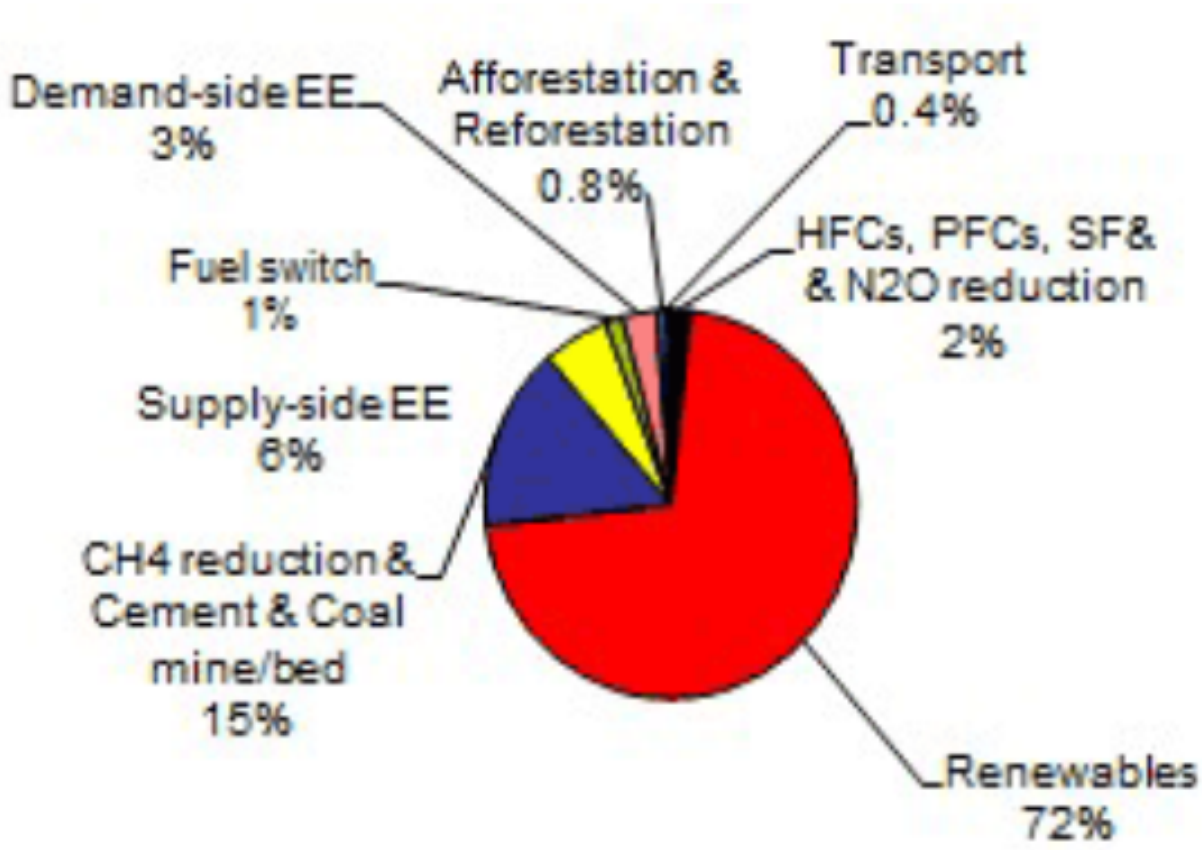


Implementation of five measures at no net economic cost would bridge almost half of the gap between current trends and a Paris Agreement trajectory

© OECD/IEA 2018

Source: World Energy Outlook 2018

Percentage share of the total number of projects of in the CDM categories



Source: May 1st 2019 http://www.cdmpipeline.org/cdm-projects-type.htm

Why EE is under represented in CC Mitigation ?

- No baseline data!
- No human or institutional capacity
- Absence of policy framework
- No availability of technology
- Small scale, granularity, hidden resources…
- In short, KNOWLEDGE is missing

Like any other Fuel
Energy Efficiency requires

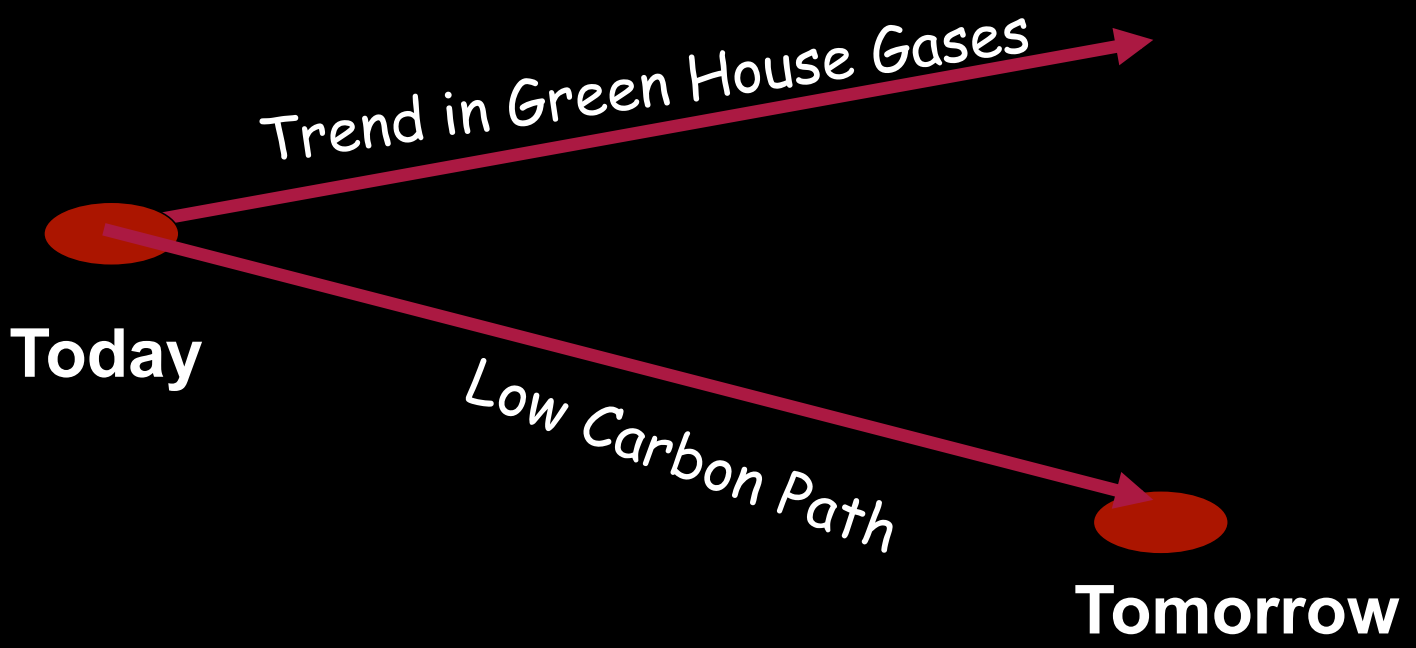
1. Evidence
2. Technologies
3. Know how
4. Finance

} Vision
Dedicated Staff
Business plan

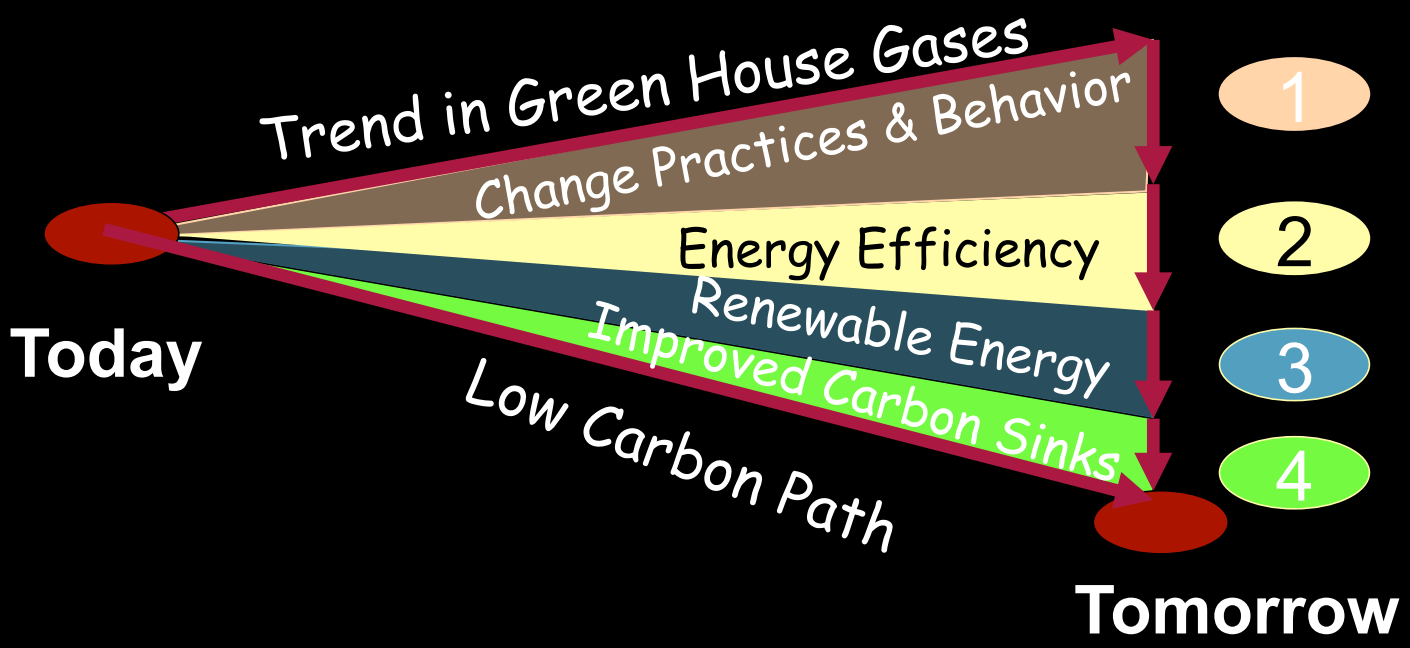
A favorable global policy context for EE

- UN Sustainable Energy for All (SE4All): SDG 7
- UNFCCC (TEC, Paris Agreement)
- Clean Energy Ministerial (CEM)
  www.cleanenergyministerial.com
- G20 www.g20.org G7
- IEA
- WEC World Energy Council
- EE on numerous local agenda (cities, regions)
- And… IPEEC www.ipeec.org

The Paris Agreement : moving on a low carbon path



Four wedges for a low carbon development



Mitigation Measures



More efficient use of energy



Greater use of low-carbon and no-carbon energy

- Many of these technologies exist today



Improved carbon sinks

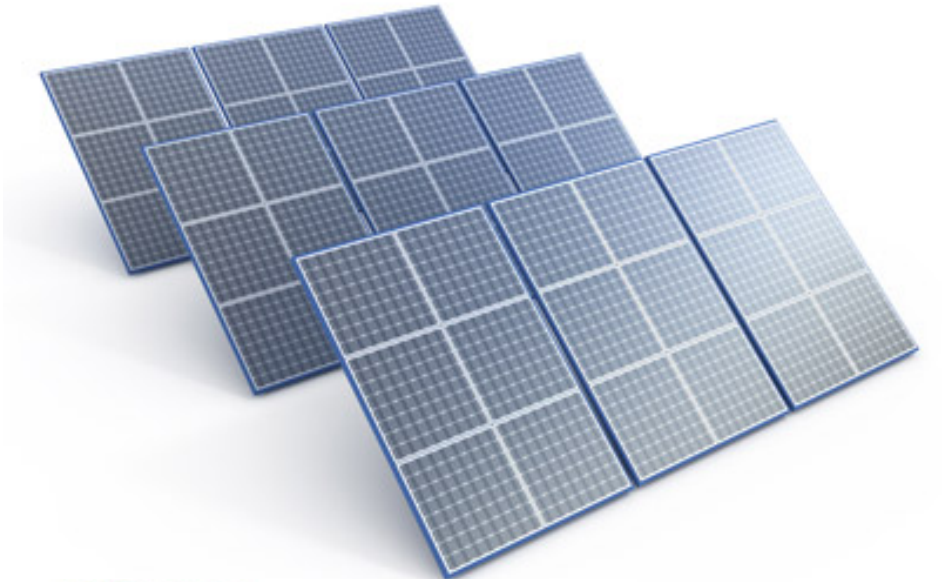
- Reduced deforestation and improved forest management and planting of new forests
- Bio-energy with carbon capture and storage

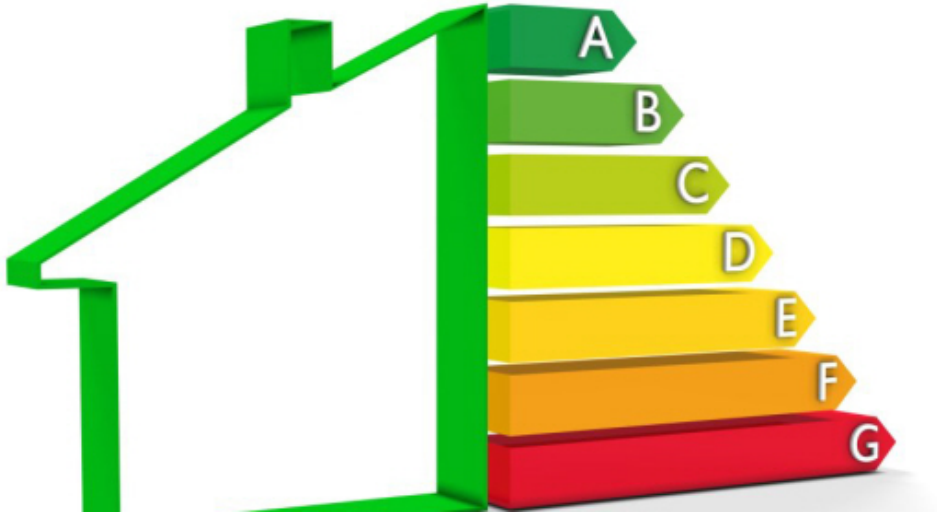


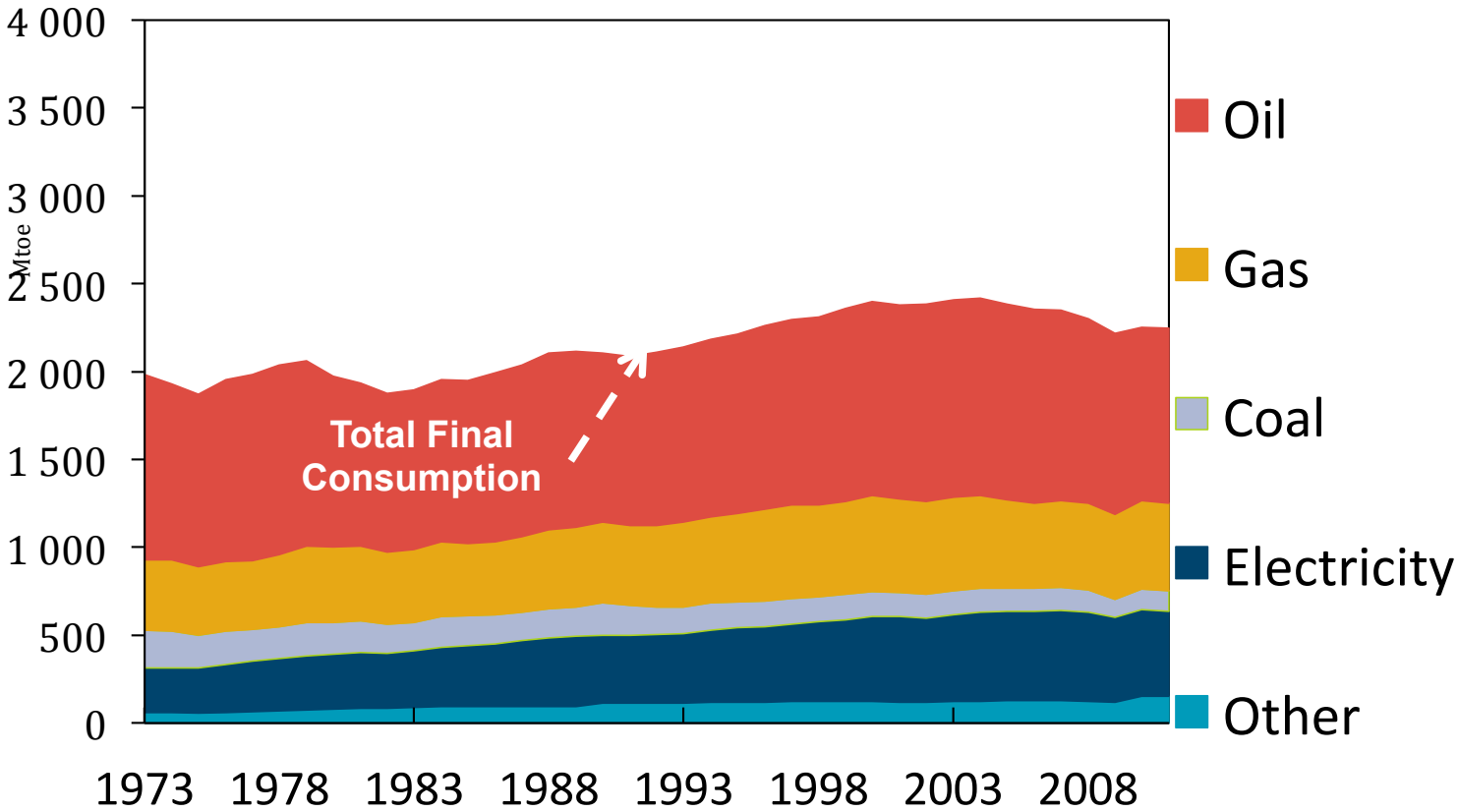
Lifestyle and behavioural changes

AR5 WGII SPM






A
B
C
D
E
F
G



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

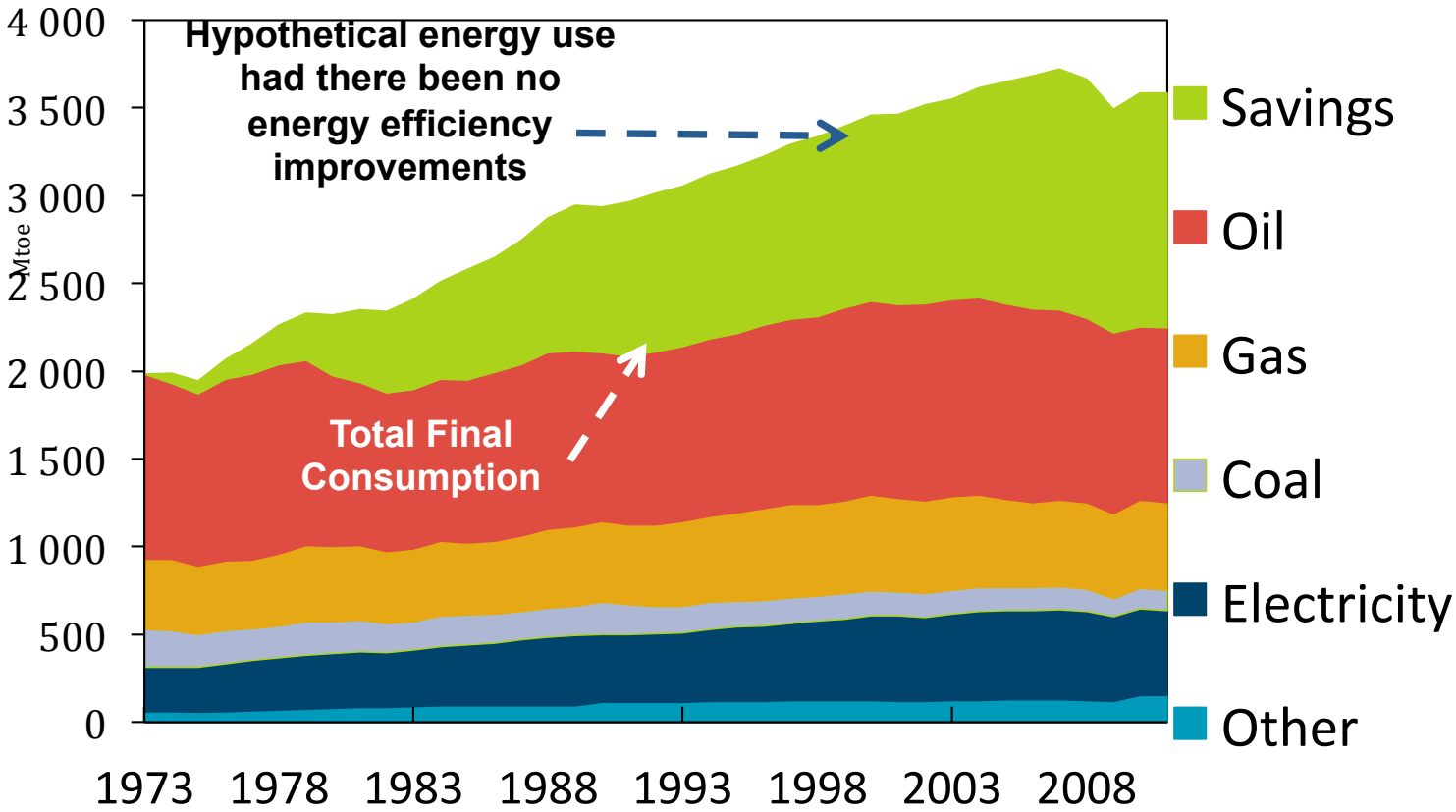
Source: IEA, Energy Efficiency Market Report 2014

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International Energy Agency
Secure Sustainable Together

Energy Efficiency – The 1st Fuel

www.iea.org



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

Source: IEA, Energy Efficiency Market Report 2014

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If EE is a fuel, why EE in not supported like other fuels are?

- IRENA
- OPEC
- IGU
- IAEA & NEA
- WCA
- IEA

Energy Efficiency can unfortunately be its own enemy

- Rebound effect
- Shortermism
- Weak institution
- Communication pitfalls
- ….





REPÈRES

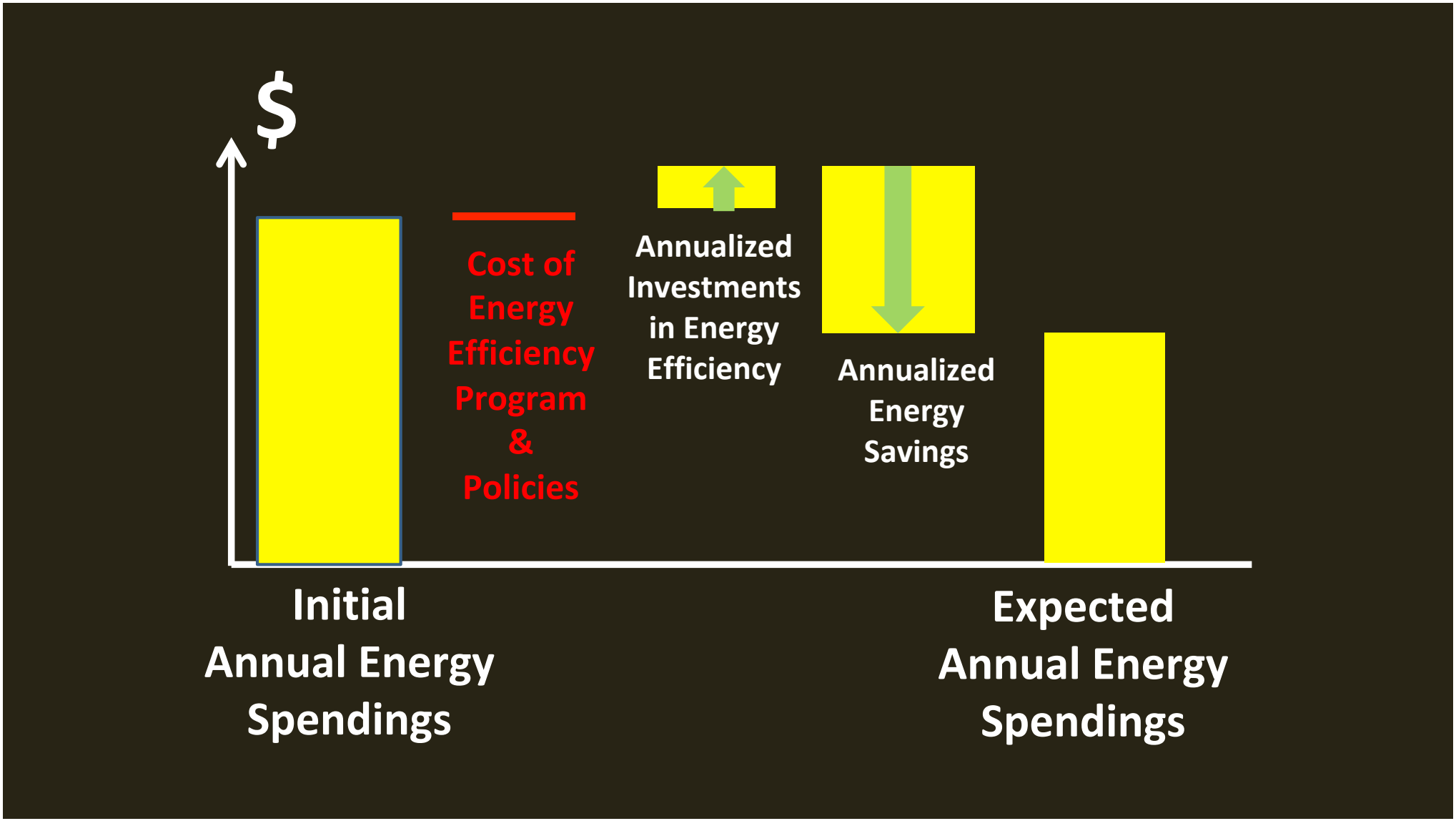
legal and financial journal

N° 20 – January 2010

Financing energy efficiency
Towards a second Arrhenius Law

Repères n°20 takes a look at energy efficiency fin ancing from a new angle. This paper highlights the paradox of projects not being implemented despite high profitability. It seeks to make an analogy between the kinetics of chemical reactions and those of microeconomic projects – an analogy that may inspire new operating methods for donors' projects. This article also contributes to enhancing reflection on the use of subsidies. It highlights the limits of an over-simple alternative that earmarks subsidies for unprofitable projects, and calls for all financially-balanced projects to be financed by loans at market conditions. This reflection paves the way for an approach using subsidies as economic catalysts able to scale up processes that profitability alone cannot trigger.
Fred Ottavy.

In 1896, the Swedish chemist Svante Arrhenius became the first scientist to demonstrate the greenhouse effect of carbon dioxide and envisage its impact on the climate. In the spirit of the


$
Cost of Energy Efficiency Program & Policies
Annualized Investments in Energy Efficiency
Annualized Energy Savings
Initial Annual Energy Spendings
Expected Annual Energy Spendings

EE is part of Knowledge Economy

There are two types of resources

Finite Resources:

- Fossil Energy
- Minerals
- Land, Sand…

The more we share, the less we have

Immediate

Infinite Resources:

- Renewable Energy
- Knowledge, Friendship, Love
- Energy Efficiency

The more we share, the more the resource grows

Sharing takes time

If you think education is too expensive, try ignorance

Jeff Rich, Derek Bok, or Albert Einstein

If you think energy efficiency is too expensive, try energy inefficiency

Energy Efficiency in 6 “Ds”

- De-coupling
- De-carbonization
- De-centralizatioin
- Digitalization
- Disruptive
- Desirable

Conclusion

- Energy Efficiency is a fuel
- Energy Efficiency needs to be fueled

  (& money exists to support what EE needs)
- International cooperation accelerates the sharing and deployment of good practices

Merci!

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