Workshop on

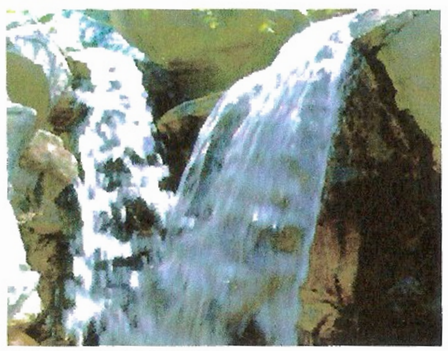
"Global Climate Change: Present and Future Challenges"

New York May 18-19 2001

Discussion on Overview of Impacts: a viewpoint from outside IPCC community

Fabio PISTELLA

? ?



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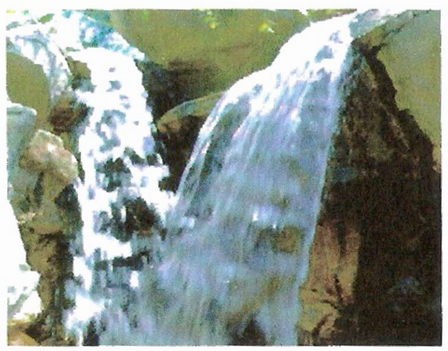
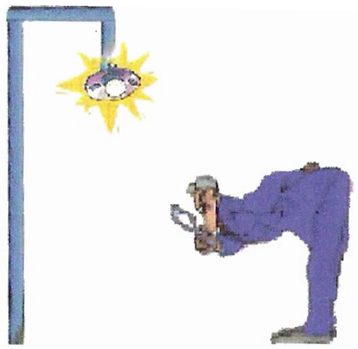


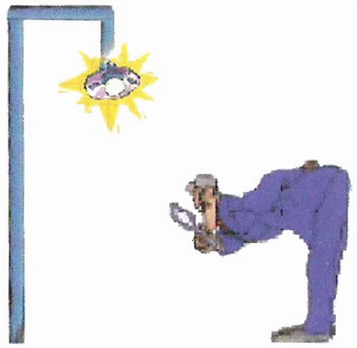


Is there a way-out of present impasse ?

The possibility of a wide consensus based on “common sense” and an operational approach

How to identify the basis for such a consensus

Priority actions to be implemented

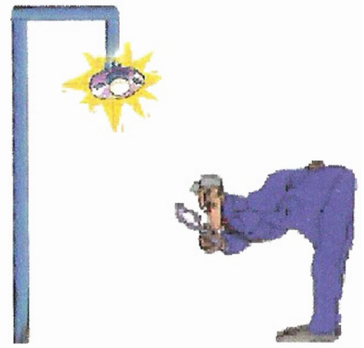


The possibility of a wide consensus

Some facts are not controversial

- Kyoto protocol is not being implemented with decisive results
- energy consumption in developing countries is expanding and will soon represent the largest share
- energy efficiency and fuel mix are unfavorable in developing countries
- CO_2 emissions by developing countries will soon exceed those by industrialized countries

A viewpoint from outside the IPCC community

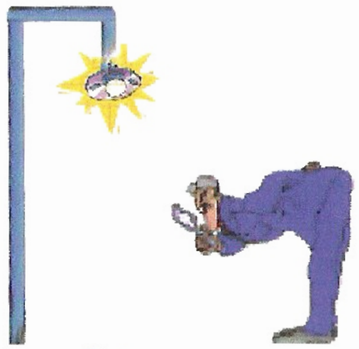


Kyoto protocol is not being implemented with decisive results
It was stipulated:

- to increase energy efficiency and expand the capacity to absorb green-house gases released in atmosphere (e.g. forests);

- to eliminate distorsion factors in the market (such as: fiscal incentives, taxation, subsides) favouring green-house gases emissions and to encourage political and economical reforms aiming at the reduction of green-house gases emissions;

A viewpoint from outside the IPCC community



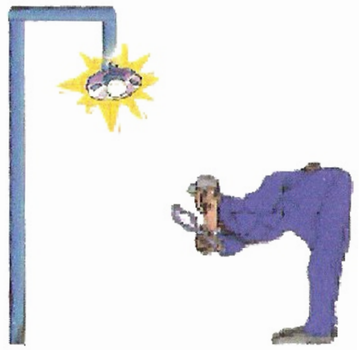
Kyoto protocol is not being implemented with decisive results
It was stipulated:

- to undertake measure for agriculture and renewable energies to promote both sustainable agriculture production and the development and use of new renewable energy sources

- to set-up specific measure for green-house gases emission in transportation, the emission of methane from waste disposal and losses in natural gas piping and the emission of other gases due to air and maritime traffic

- to launch cooperation programs among developed countries and countries with transition economy to make the implementation measures more efficient and more effective

A viewpoint from outside the IPCC community

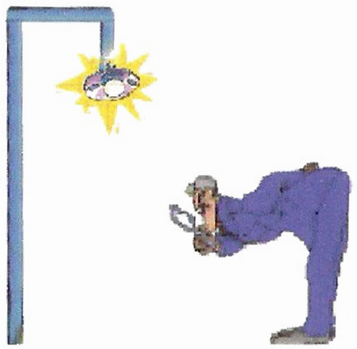


The results really achieved are very limited

Some decision makers are now convinced that Kyoto is simultaneously too ambitious to be politically accepted and too prudent to be sufficient

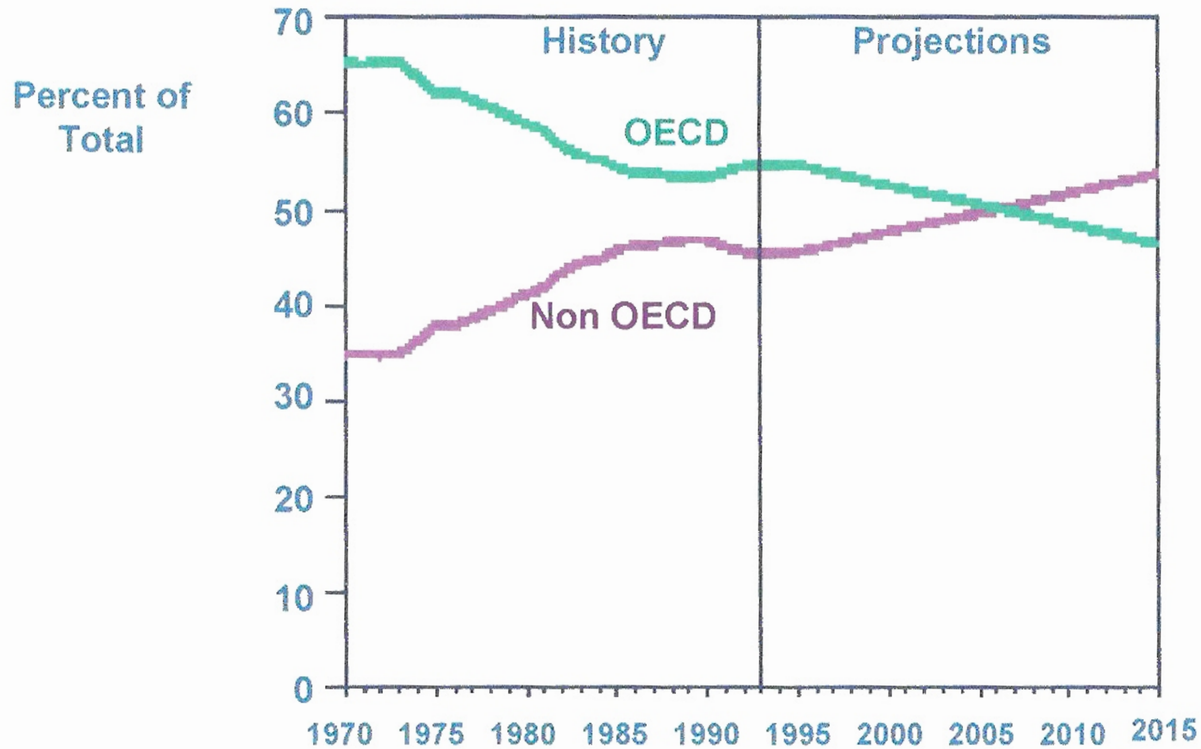
- too ambitious in the conception of global choices for the future of mankind a field controversial and understandably play ground of politics
- too prudent in specific engagements which even if are controversial are costly and largely insufficient
- even as a first step it's not so "wonderful": it's not surprising that is is not implemented

A viewpoint from outside the IPCC community



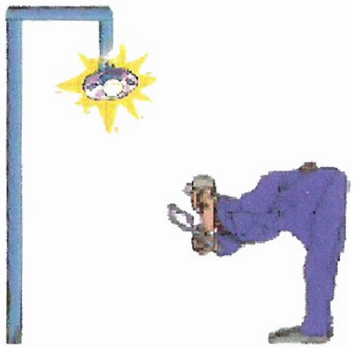
Energy consumption in developing countries is expanding and will soon represent the largest share

OECD and Non OECD Energy Consumption 1970 - 2015



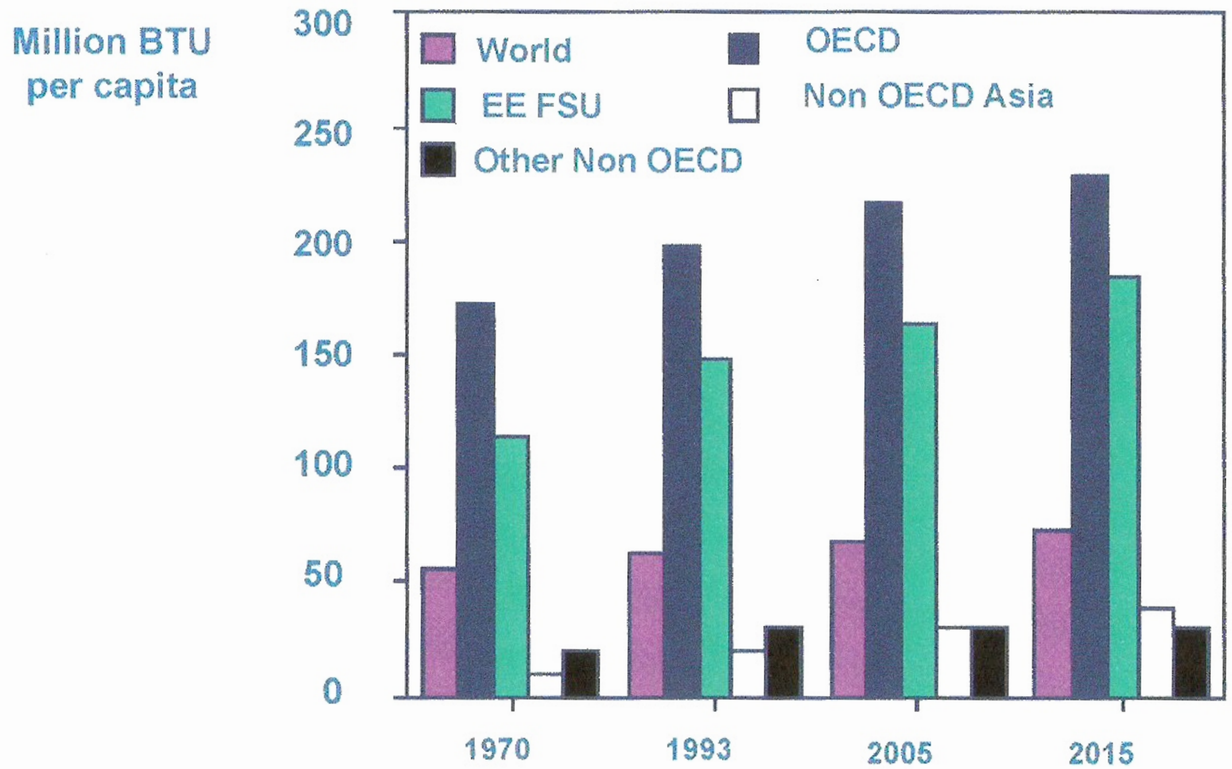
Sources: Energy Information Administration (EIA)

A viewpoint from outside the IPCC community



Energy consumption in developing countries is expanding and will soon represent the largest share even if per capita values are kept very low

World Energy Consumption per Capita by Region 1970 - 2015



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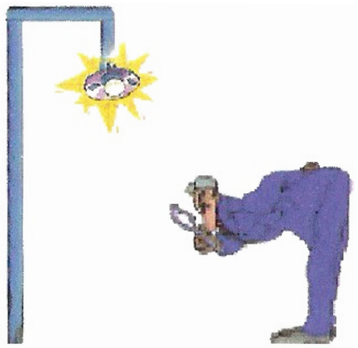
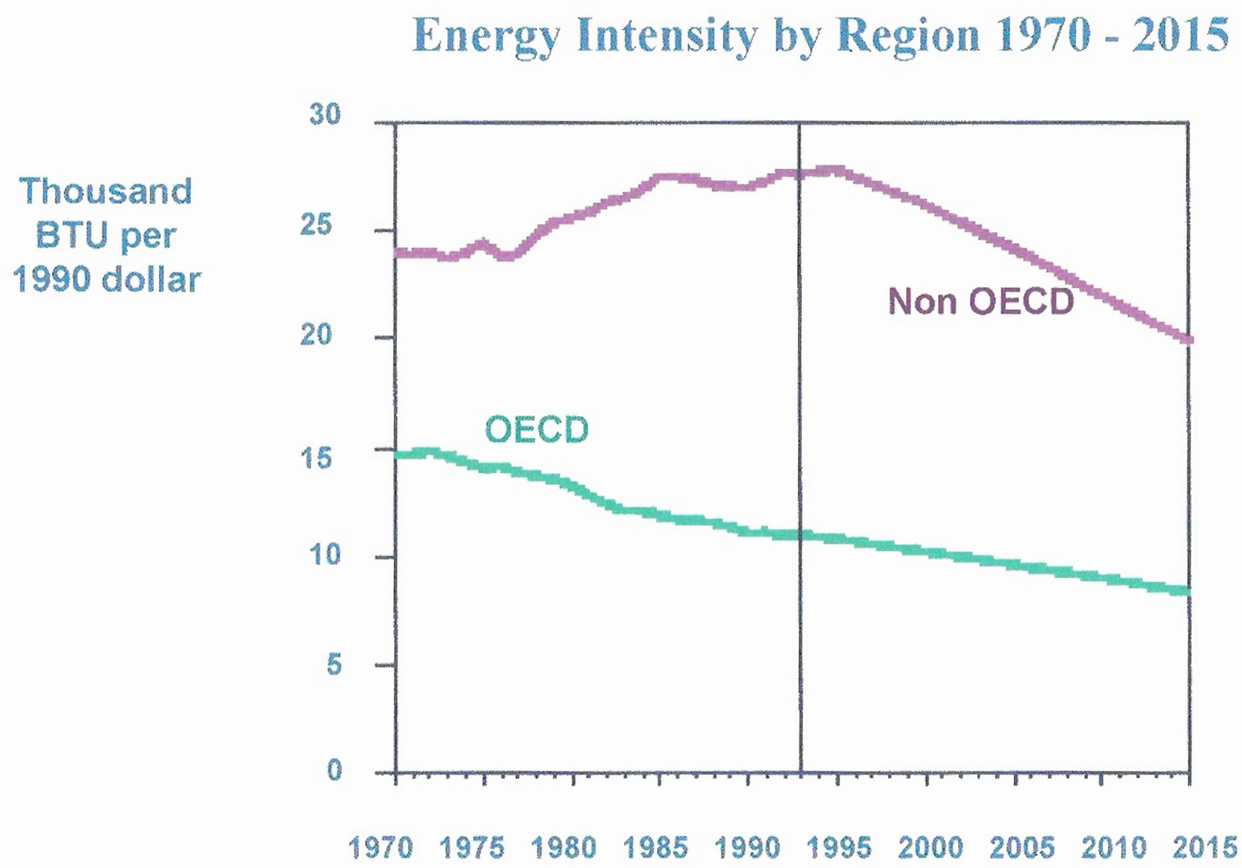
A viewpoint from outside the IPCC community



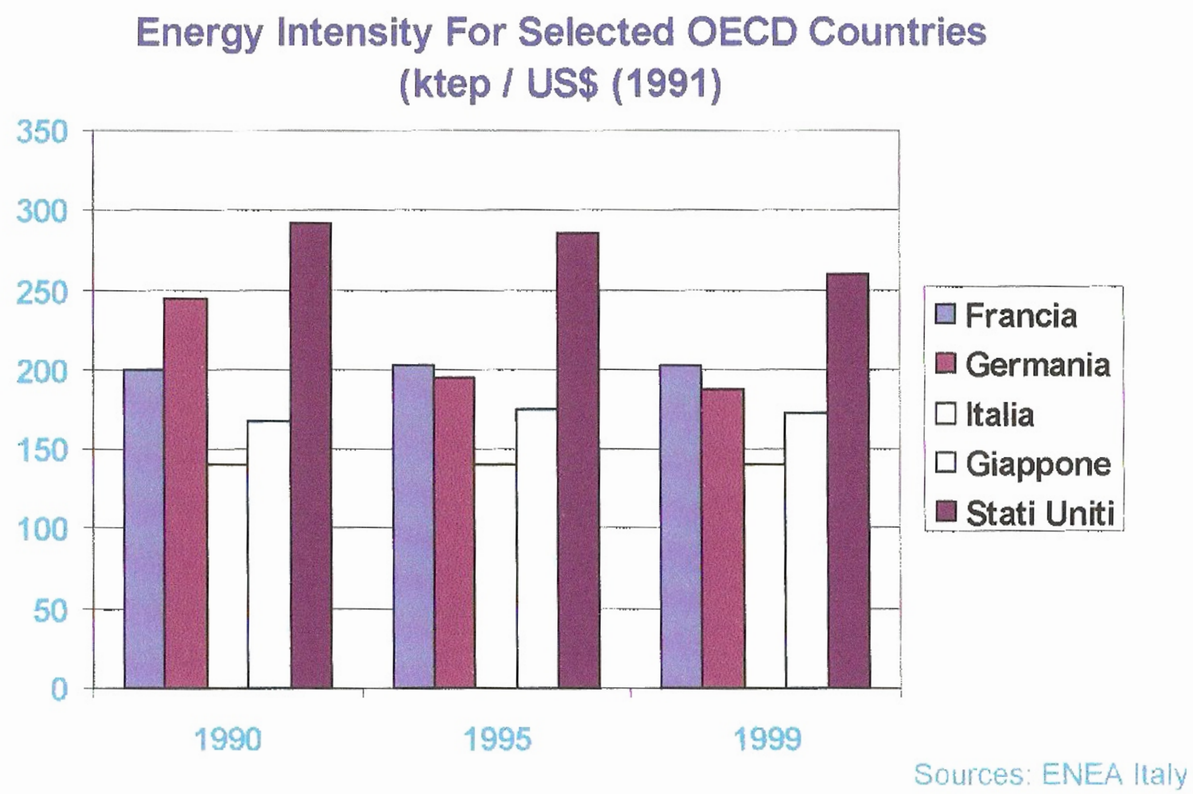
Energy efficiency is lower in developing countries



Sources: Energy Information Administration (EIA)

A viewpoint from outside the IPCC community

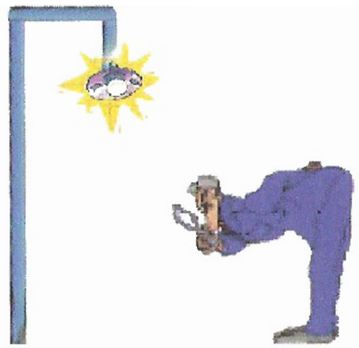
Energy efficiency is different in various OECD countries



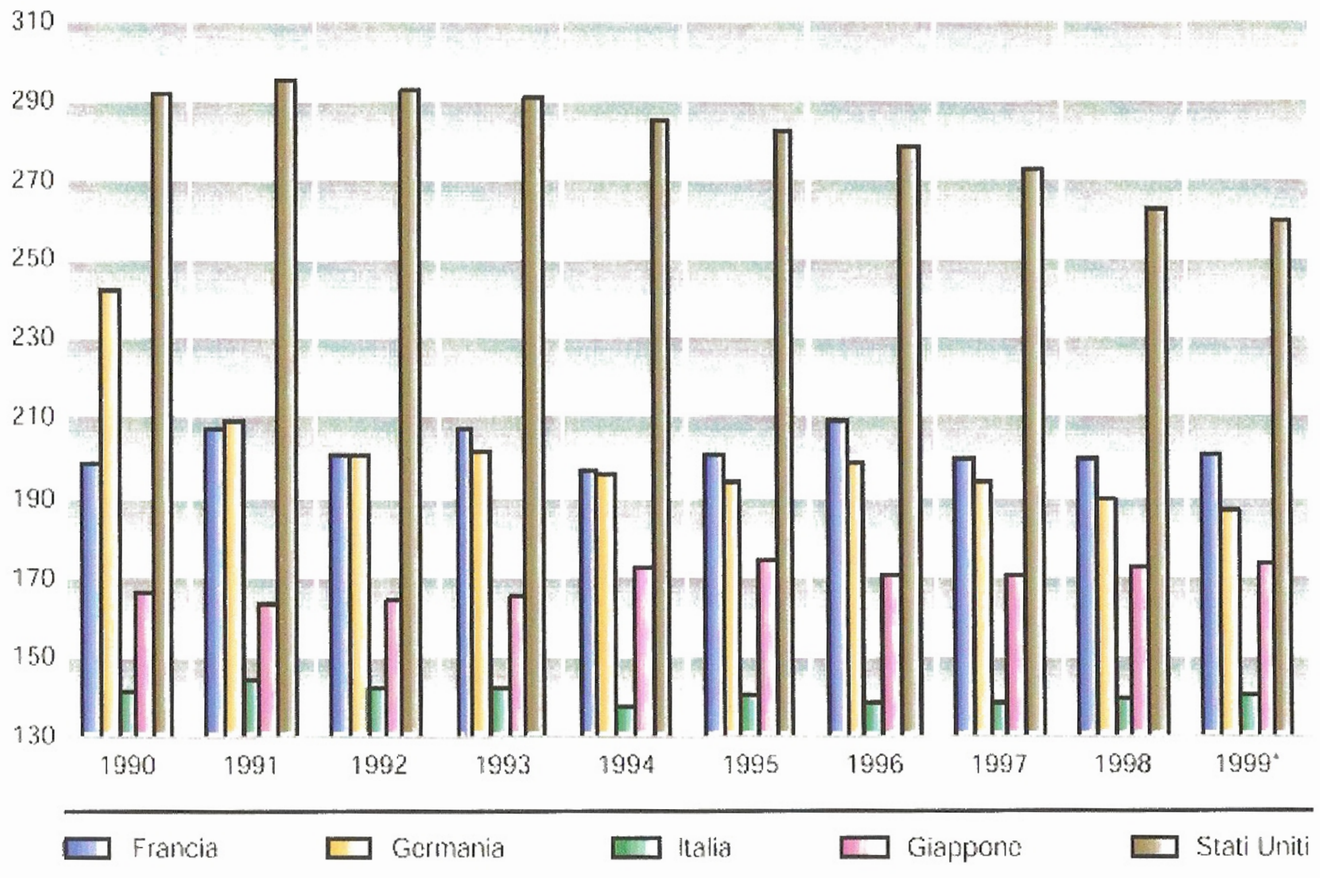
Italian economy, among those of OECD countries, is not the most concentrated on low consumption sectors; therefore the low levels of energy intensity achieved reflect an excellent efficiency of use in primary sources

A viewpoint from outside the IPCC community

Energy efficiency is different in various OECD countries



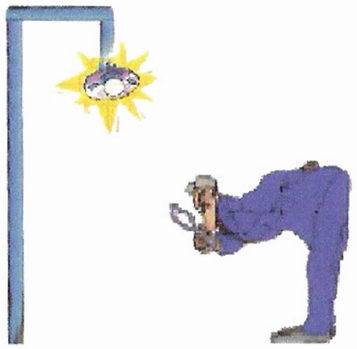
Intensità energetica nei paesi OCSE (kep/US$$_{91}$ a parità di potere d'acquisto)



* Dati provvisori

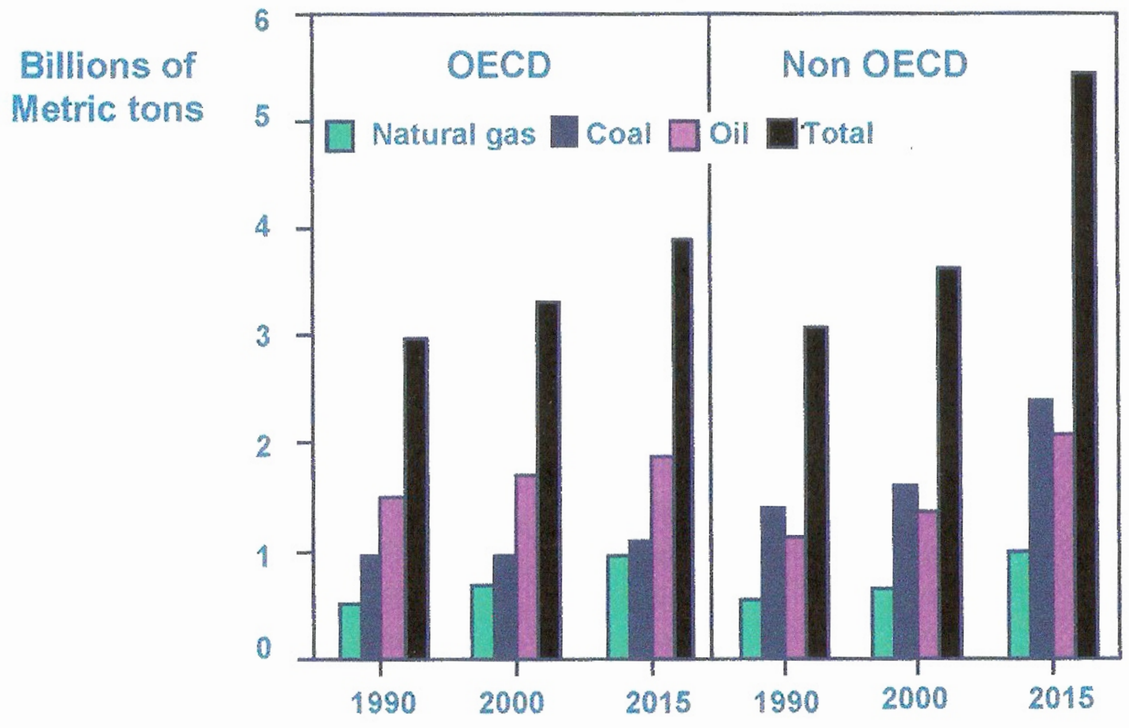
Fonte: elaborazione ENEA su dati IEA

A viewpoint from outside the IPCC community



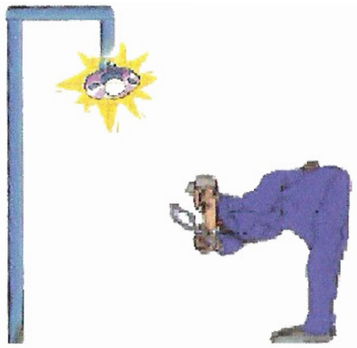
CO_2 emissions by developing countries will soon exceed those by industrialized countries

World Carbon Emission by Region and Fuel 1990, 2000, 2015



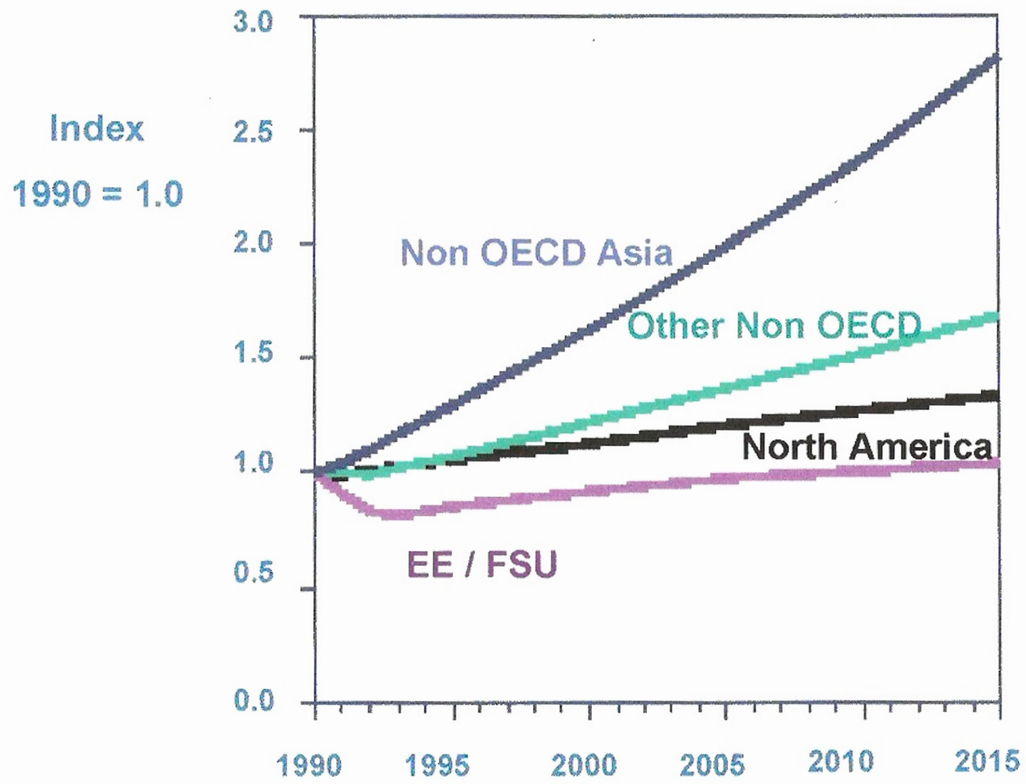
Sources: **History (1990):** Derived from Energy Information Administration (EIA), *International Energy Annual 1993* DOE/EIA 0219/93 . **Projections**: EIA World Energy Projection System (1996).

A viewpoint from outside the IPCC community



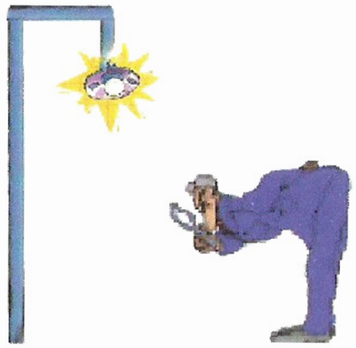
Attention should be put on high-impact events that have not taken place yet

Growth in Carbon Emissions by Region 1990 - 2015



Sources: **History (1990):** Derived from Energy Information Administration (EIA), *International Energy Annual 1993* DOE/EIA 0219/93 . **Projections**: EIA World Energy Projection System (1996).

A viewpoint from outside the IPCC community

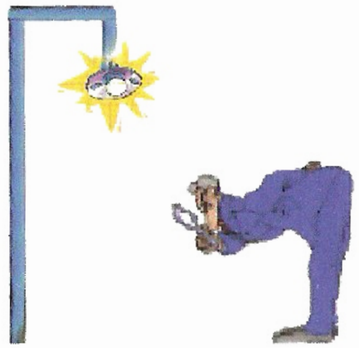


How to identify the basis to build consensus

Some "macro and impolite" questions

- *when* there will be a change from lip service to actions with real impact
- *what penalties* will be undergone if obligations are not fulfilled
- *which actions* are really more cost effective (why did we abandon *no regrets* approach)
- *who will pay* for the actions (let's recognize that *where* is immaterial)
- what are the pros and cons of a "*wait and see*" policy
- *why* should a slim guy undergo the same diet as a fat guy

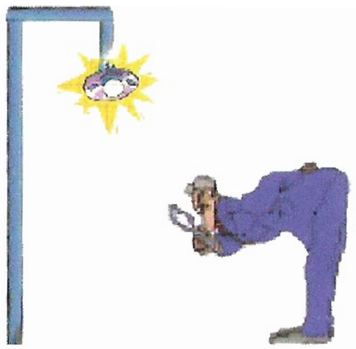
A viewpoint from outside the IPCC community



How to identify the basis to build consensus

Some “less macro but still impolite” questions

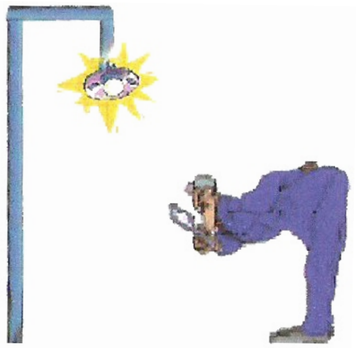
- is there any credible solution available for CO_2 segregation
- are models capable of giving at present predictions that are not controversial
- is the approach adopted in IPCC Working Group III on economic aspects stick to the role or pursuing also the objective of redesign human society



How to identify the basis to build consensus

Do we really need to agree on predictions to decide some action ?

- the story of *the sly widow* or "yes provided ….. "
- the story of *the drunk man and the keys he lost* or "useless but comfortable is better than useful but uncomfortable"

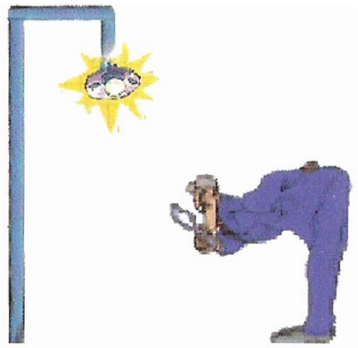


How to identify the basis to build consensus

Two basic criteria

- maximum value out of money spent
- balanced sharing of costs and benefits

Priority actions to be implemented



Profitable investments to increase efficiency in energy conversion and use in new plants wherever they are built:

- "minimum efficiency" requisites for new plants
- revolving funds for additional investment cost to be repaid through reduction in operational costs
- technology transfer and support for higher efficiency in plants and industries already in operation

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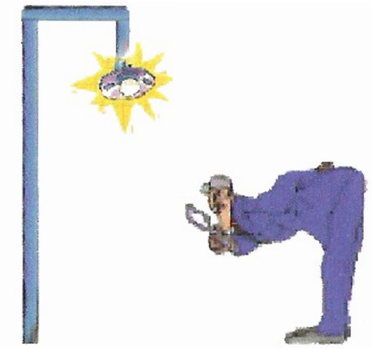
Similar considerations can apply to other important sectors such as transportation

A viewpoint from outside the IPCC community

Priority actions to be implemented

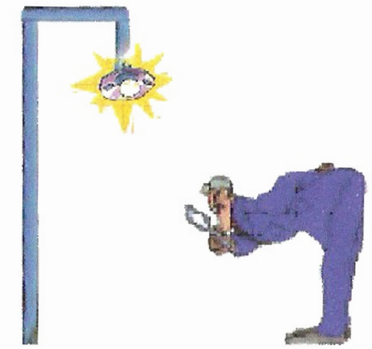


Promotion of research development and demonstration on:

- new technology and methods for efficient use of energy
- global change modeling verification and monitoring (insisting on the fact that modeling climate is a value and a necessity *per se*)
- new energy sources
- CO_2 segregation

A viewpoint from outside the IPCC community

Priority actions to be implemented

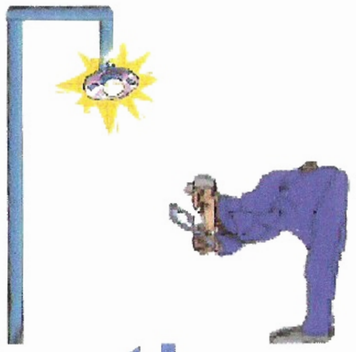


An agreed target for stabilized emission level

- reduce controversy and
- to "give confidence or at least the hope" that the situation is under control

Further implementation and some reform in the field of investigation of IPCC Working Groups

A viewpoint from outside the IPCC community



Simple suggestions in the communication strategy, to avoid to be blocked

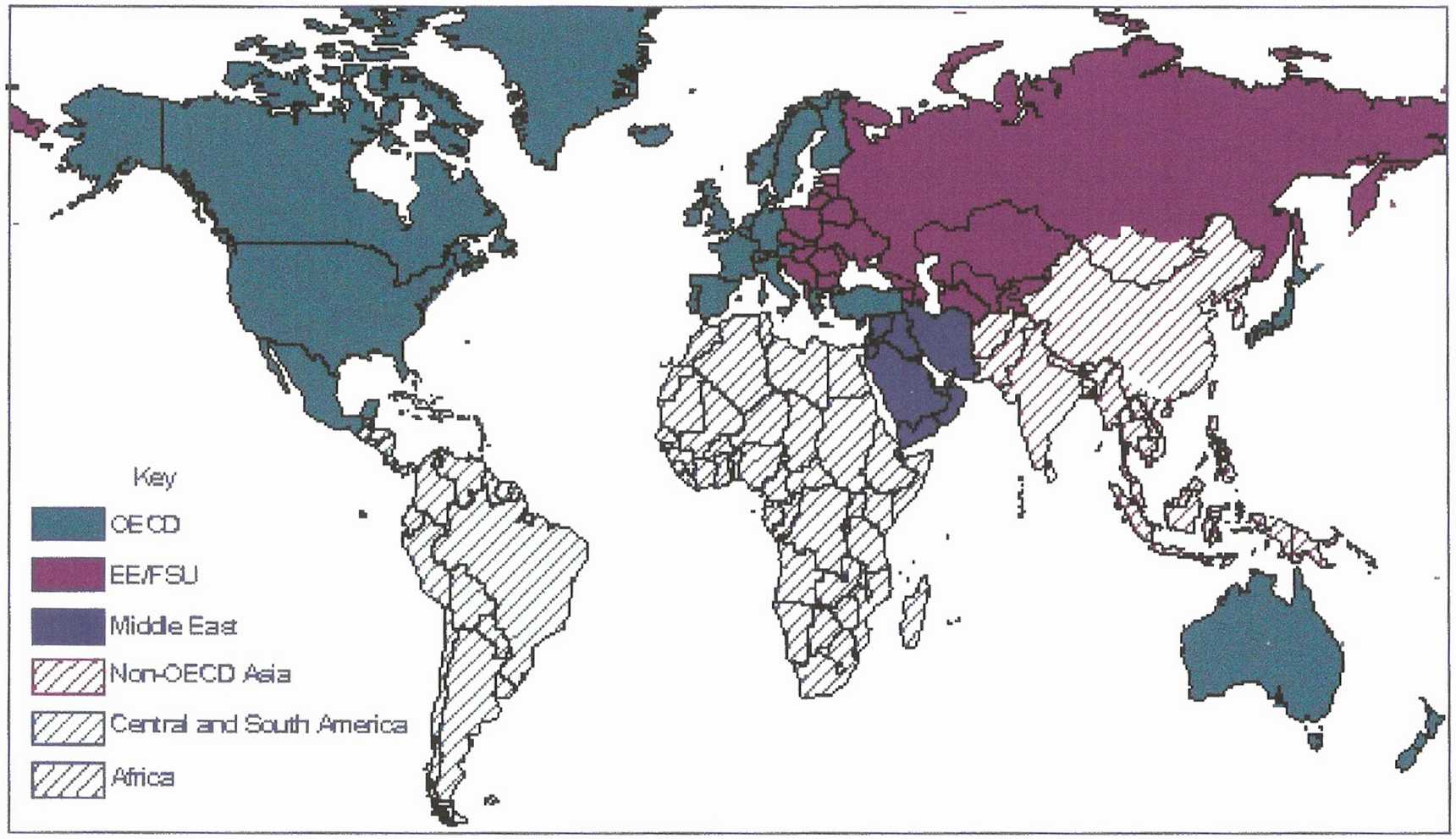
The "no regrets" approach should be *reinstalled with some amendment:*

- not only negative cost actions but also low cost actions should be identified and their implementation promoted
- the same approach should be applied to adaptation as well

Presentations of possible approaches towards the "redesign of human society" should be avoided

A viewpoint from outside the IPCC community

Figure 1. Map of the Six Basic Country Groupings



Source: Energy Information Administration, Office of Integrated Analysis and Forecasting.