

# Celsius vs. the euro

*by*

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Global warming is inevitable<sup>1</sup>. At least that is the prevailing scientific view today. Putting aside the current undeniable uncertainties<sup>2</sup> on the precise nature and extent of the impact, the consensus view among experts and political leaders is that global warming will lead to rising sea levels and harmful climatic upheavals, given the extreme difficulty in adapting current farming practices, modifying infrastructures<sup>3</sup> and relocating populations.

So we have two battles on our hands: 1) to attempt to mitigate the negative impacts of these future upheavals (some of which, by the way, will be positive<sup>4</sup>); and 2) to try to tackle the problem at the source by combating the causes of global warming (beyond the actions that have already been taken).

## Two objectives

On the first front, Copenhagen summit<sup>5</sup> participants and political leaders currently seem to be focusing too much on reducing CO<sub>2</sub> emissions. There is little talk of helping the peoples of the Indian and Pacific Ocean islands and Asian deltas, who will have to relocate within a few decades.

Fighting the causes of global warming today will not keep major upheavals from occurring in the next 50 years. We can install all the photovoltaic panels we want on the roofs of Venetian palaces to reduce CO<sub>2</sub> emissions, but that still won't spare the city from constant flooding and, ultimately, sinking into the waves.

Developed and near-developed economies have skills (in climatology, infrastructure engineering, farm yield enhancement, social sciences to manage population relocations, etc.) that can be put to use to assist countries and regions that will be hardest hit by the effects of global warming.

The answer isn't in writing blank cheques to governments (who wouldn't necessarily use them for their intended purpose) but rather in setting up and coordinating international programmes that within a few decades can relocate populations, redirect farming practices in certain regions, and develop key infrastructures, including protective dikes and more efficient irrigation systems.

This is a daunting task, with considerable human and financial challenges and immense political obstacles. But we must start today, if we are to produce the desired outcomes within 20 to 50 years. At best, we are just taking our first steps<sup>6</sup>.

On the second front – the fight against the causes of global warming – there is also much to be done, and some programmes don't seem to make much sense.

For example, if France truly intends to implement its “Grenelle” environmental programme, it will cost €440 billion by 2020<sup>7</sup>. This would mean an increase (not counting other expenditure

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<sup>1</sup> By 1.8 to 4.0° between 2000 and 2100

<sup>2</sup> Changes in sea currents, impact of micro-particles, etc.

<sup>3</sup> For example, UHV towers in the Siberian permafrost, which will melt

<sup>4</sup> As land nearer polar extremes or at higher altitudes, in mountains, becomes arable

<sup>5</sup> At least in its direct costs, which are estimated at €150 million

<sup>6</sup> A special \$200 million fund has been in place for three years now.

and debt of national and local governments) of one third of the public debt as of the end of 2008 (€1,354 billion, or 70% of GDP). This simply is not realistic.

It is instructive to frame this issue on a smaller scale. Insulating a 5000 m<sup>2</sup> block of flats (including attics, roofs, interior walls, doubled-paned windows with insulating frames) is not cost-effective. When discounted at 12%, an investment of about €200,000, depending on the energy that it saves and even when including the energy savings certificates obtained by the owner, has a negative net present value of about –€100,000.

Some of the current objectives and the subsidies intended to meet them are simply not sustainable.

Meanwhile, national interests (both political and industrial) often seem to overshadow global and even local economic and environmental logic (in terms of the specific issue). Subsidies and other incentives such as tax credits seem to have been set on the basis of nothing other than an all-out effort to make a given CO<sub>2</sub>-reducing technology artificially cost-effective.

Photovoltaic electricity now sells at a price that is three times higher than wind energy and six times higher than that produced by an average European mix of nuclear, coal, gas and hydroelectric. And even assuming technical progress and that solar panel makers climb a steep learning curve, there is almost no chance that its costs will one day be competitive. True, we can go ahead and invest in “renewable” technologies, but as long as we’re spending taxpayers’ (or consumers’) money, we may as well try to achieve the greatest possible CO<sub>2</sub> reduction per euro spent.

The inescapable conclusion is that many programmes make no sense as part of an overall programme:

- More than 30% of wind installations built in China (with subsidies) are not connected to the grid and are therefore inoperative (because grid operators have been unable or unwilling to set up the necessary power lines);
- It is now generally acknowledged that growing maize-based biofuel generates more greenhouse gases (from the seed stage to the fuel stage) that it saves;
- There are proportionally almost 10 times more photovoltaic panels in the Hamburg region (not known for its sunny climate) than in Sicily.

True, some effective (i.e., low-cost, high-impact) measures have been taken, including phasing out incandescent light bulbs, implementing building heat controls, and offering tax credits for heat pumps. Let’s hope that this has been by design and not a statistical accident.

Allocating more or less scarce resources is a major challenge that underlies any medium or long-term strategy.

### **When subsidies makes sense**

The inescapable conclusion is that countries most readily grant “green” subsidies when they boost GDP growth. Germany’s photovoltaic industry is an example of a job-creating machine, even if the jobs may be temporary. China insists that any wind power installations set up there be built in China.

And why not? But subsidies must still ultimately create value. Encouraging a nascent industry that is expected to be competitive and able to do without subsidies in the short or medium term is legitimate and economically justified. But propping up white elephants that are unable to survive on their own, isn’t.

Right now, subsidising basic R&D on energy storage makes sense. Subsidising the maize or beet biofuel industry is an economic and environmental aberration, especially given the huge amounts involved and the large farming areas that must then be set aside for this purpose.

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<sup>7</sup> €100 billion for transport, €20 billion for waste management, €115 billion for energy, and €205 billion for energy services

Public investments with no rational economic basis will only further penalise the already weak economic growth of Western countries.

### **Growth or warming?**

In addition to spending the public purse wisely, a more basic issue is that of the North-South divide (or East-West divide when thinking in terms of Europe and Asia). Seeking to impose greenhouse gas reduction targets on China and other high-growth countries (from Asia to Brazil) that are similar to the targets that developed countries have set or plan to set for themselves is curious to say the least, including from a statistical point of view.

True, China is now the largest emitter of greenhouse gases in absolute terms, but on a per capita basis it emits only half of what Europe does, one quarter of the USA and 45% of Russia<sup>8</sup>.

Politicians sometimes seem to have cast aside good sense. A country like China has an interest in regulating industry and consumption in order to prevent natural disasters. It suffers enough from drought, deforestation and related problems (flooding, loss of farm income, etc.) to take appropriate measures itself. Europe and the USA did the same thing, without international pressure, when acid rain ravaged their forests in the 1960s and 1970s. They imposed sulphur dioxide emission controls on coal-fired power plants and nitrous oxide restrictions on cars.

In the recent discussions surrounding Copenhagen, it was hard not to see a clan of developed economies with structurally weak growth (Europe and Japan) seizing gleefully on this way of keeping upstart emerging economies from growing too quickly for their taste. The US, meanwhile, is caught in the middle. On the one hand it is the biggest per capita “polluter”; on the other hand, its future growth prospects are somewhere between those of Europe and emerging economies.

A consensus is hard to establish between the *de facto* enemies of economic growth, organisations ready to waste billions that they don’t have, and the rational proponents (or those trying to be rational proponents) of robust but environmentally friendly growth.

Money taken out of the market economy must be allocated rationally. Otherwise, we will have *both* global warming (with its impact on vulnerable populations) and anaemic global growth, which will carry as many, if not more, threats to social stability.

Each company, meanwhile, should keep its feet on the ground in making its own plans. Some sustainable development and energy savings initiatives do indeed make sense and are viable. Others are based only on public subsidy, some of which will be maintained by governments for the long term, as long as there is a political and scientific consensus in support of them.

Other initiatives, however, are so unrealistically dependent on public subsidies and have such uncertain prospects that they will die out sooner or later. Beware of the trap of investing in such initiatives. Investing in sustainable development requires analysing not just apparent market and economic trends but above all, the sustainability of the “business models” of the governments that support such initiatives.

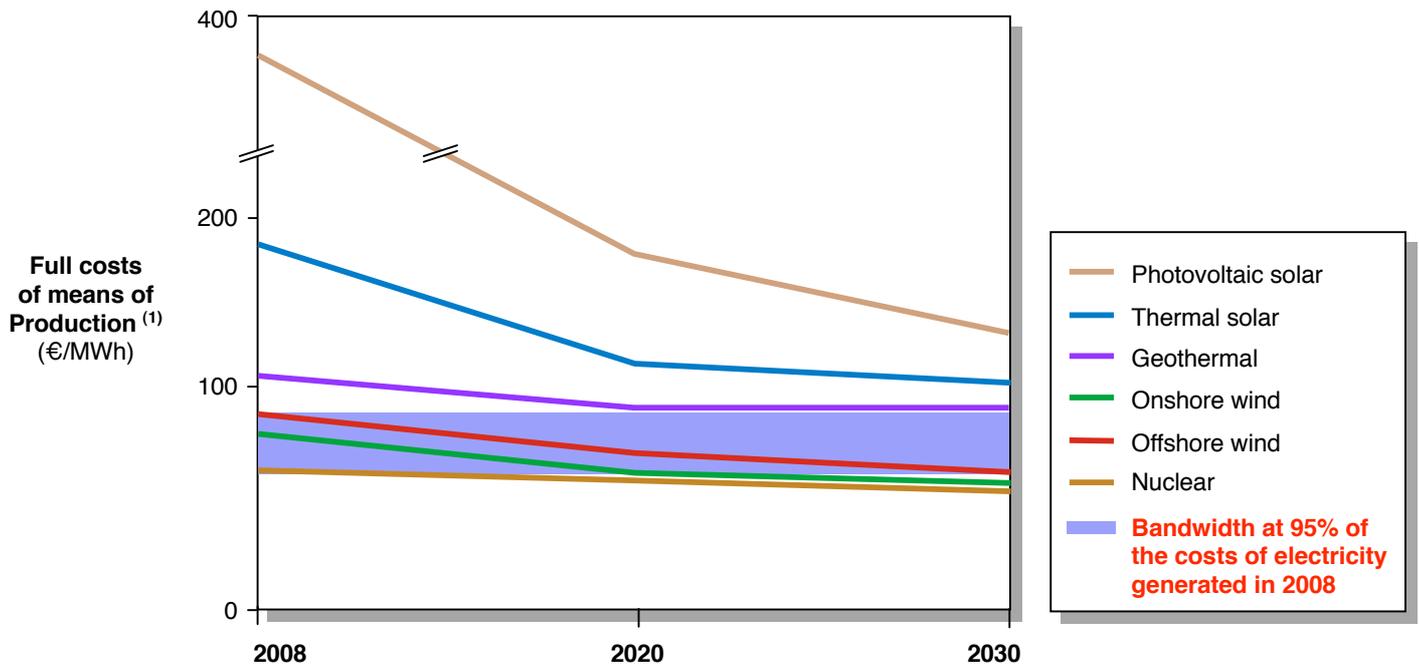
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*Estin & Co is an international strategy consulting firm with offices in Paris, London, Geneva and Shanghai. The firm helps senior managers of large European and North American companies develop and implement growth strategies, and works with private equity funds to assess and value their investments.*

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<sup>8</sup> In CO<sub>2</sub> tonne-equivalent excluding changes in land use (deforestation, urbanisation, etc.). Source: World Resources Institute

**- Table 1 -**  
**Projected trend in production costs**  
 Europe, 2008



(1) Moderate growth assumed in fossil fuel prices during the period  
 Sources : RTE, PowerNext, Estin & Co analyses