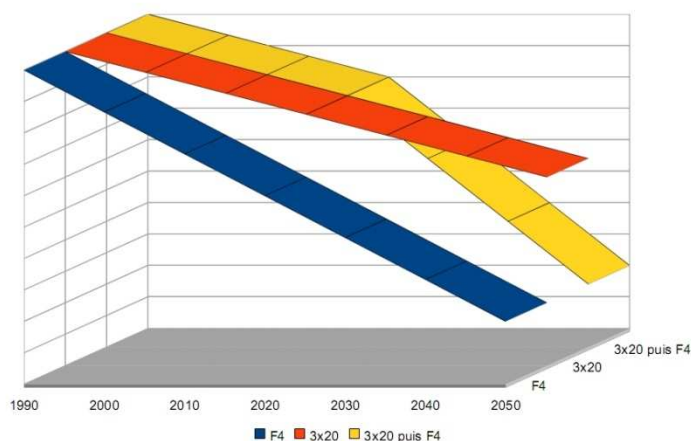


## 2020 versus 2050?

Gérard Magnin, Energie-Cités, September 2009

We are faced with energy and climate challenges that oblige us to simultaneously ponder short, medium and long-term considerations. All society players, regardless of their sector of activity, are concerned by this new exercise. Although there is a fairly strong consensus amongst the players when remote time horizons are involved (cf. “factor 4” – F4 - by 2050), said consensus tends to weaken when shorter horizons supposedly geared to implementing factor 4, like the “3x20” in 2020, are considered and is virtually non-existent when it comes to establishing next year’s budget (the energy-climate tax for 2010 is a good example of this). In fact, such overlapping time frames raise a number of issues and lead to confusion.

**1 – It is incorrect to say (even implicitly) that the “3x20” by 2020 are aligned on “factor 4” by 2050.** The “3x20” trajectory (considering a 1990 baseline and, therefore, a 30-year period) actually leads to a 1.4 reduction factor by 2050 (30 years after 2020). We are therefore way off the target but we pretend to ignore it... This is why -40% by 2020 would be a more relevant objective (let us not forget that 2020 is midway between 1990 and 2050!). Converted into indices, this would give: 100 by 1990; 60 by 2020 (-40% base 1990) and 20 by 2030 (-80% base 1990, that is, -66% base 2020). But achieving -20% by 2020 and F4 by 2050 would involve tremendous, not to say unattainable efforts in the post-2020 period.



**2 – Achieving high emission reduction rates is easier when the baseline situation is poor, because the first measures taken are always the easiest ones.** This was demonstrated by the New EU Member States, who could significantly reduce their rather high emissions by simply adjusting their economies and societies. Thanks to them, the EU (which will have 27 members at the end of the period against 15 at the beginning) will achieve the Kyoto objectives, despite the poor performances of its Western-European members. Consequently, reducing emissions by 20% between 1990 and 2020 only represents a relatively small effort compared to what will be necessary after 2020.

**3 – However, the more easily attainable objective of -20% by 2020 often seems to be “out of reach”;** the compromises that had to be agreed to adopt the EU Energy and Climate Package and the way public budgets for 2010 or, more explicitly, the local action plans, are being prepared in an increasing number of local authorities are proof of this. The economic recession provides an opportunity of achieving said objectives (reductions are an automatic consequence of the crisis) but if a sharp and prolonged economic decline is our only way of achieving F4, we are preparing ourselves for blood and tears. The challenge is elsewhere.

**4 – Aiming at a target (-20% by 2020) rather than a trajectory (F4 by 2050) can only lead to stalemate.** It is possible to come up with technical solutions applicable on a relatively short-term basis and leading to the -20% target; switching to gas, replacing old boilers with more efficient ones, etc. Such is the discourse of the gas industry. But, assuming that this is feasible, how can we possibly move to F4 after 2021 if we only have individual gas-boilers? How can we develop renewable energy on a large scale?

**5 – Marginal reductions, unfortunately, seem to be the only solution we will have as 2020 is getting closer and becoming a short-term horizon.** It is difficult for local authorities to reverse heavy trends in town planning, mobility and building policies inherited from a past when energy was cheap and that are still largely in force today, in just 10 years. It is always possible to increase the number of cycle paths, bus or tramway lines, encourage short food circuits, design eco-neighbourhoods, etc. but the city, and even more so its periurban area, cannot be “redesigned” within such a short period of time. This is where the concept of forecasting comes in so that undesirable trends can be corrected rather than reversed. The final outcome will not be “as bad as” the business-as-usual scenario. But there is quite a significant risk that these limited objectives will not be achieved, for it is true that minor changes with no vision or enthusiasm are sometimes more difficult to accept than more ambitious ones.

**6 – It is only by thinking about the city within a broader time frame (one or two generations) that we will be able to introduce a “new deal”.** What does an “F4” or post-carbon city mean? Achieving a stock of “F4” buildings by 2050 involves stopping, *as of today*, building below passive construction standards, setting heating consumption standards in existing buildings undergoing renovations at 50kWh/m<sup>2</sup>/year and systematically installing renewable energy solutions. “F4” mobility means achieving at least 50% of walking and cycling and 40% of public transport. This trend must be set, *as of today*, by making all the public and private services we need on a daily basis accessible through soft modes of transport. “F4” food supply means producing between 20 and 30% of our food within a 100 km radius, which means protecting, *as of today*, unbuilt periurban areas for agricultural purposes. “*Backcasting*” methods, which involve describing a desirable and sustainable future and defining the flexible strategies needed to achieve it, can be used here.

## Conclusion

**“F4” is a change of civilisation.** Unfortunately, we are faced with a simple choice: either we decide to move in this direction of our own accord, or we will have to accept it one day or another, under the pressure imposed by the energy and climate events that are bound to happen, with all their economic, social and territorial consequences. This is why Energie-Cités’s involvement in local implementation of the 3x20, especially through the Covenant of Mayors<sup>1</sup>, must be coupled with a foresight reflection over the long term in order to be able to combine both aspects.

This is precisely what the IMAGINE initiative<sup>2</sup> is all about. The challenge is to demonstrate that ambitious objectives capable of changing our lifestyle (which we are prone to criticise but are extremely reluctant to change), reconciling quality of life and energy savings and making us proud of living in a sustainable city, can be activated by unsuspected social driving forces. Many towns and cities are proof of this!

The European regional policy – like many others! – has not yet integrated the indispensable changes that are needed to integrate the 3x20 (decided after the 2007-2013 policies). It is, however, vital that we redirect our efforts as of today. We must also prepare a 2014-2020 policy that revolutionises conventional approaches. Utopia? But do we really have any choice?

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<sup>1</sup> [www.eumayors.eu](http://www.eumayors.eu)

<sup>2</sup> [www.imagineyouenergyfuture.eu/blog](http://www.imagineyouenergyfuture.eu/blog)