X & Y: saving the environment & the economy

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> In these dire economic times, organizations across Europe are postponing environmental goals. They shouldn't: this is one of those areas where you can have the cake and eat it too.

March 2007 set the date for the "20-20-20" targets in the European Union: 20% less carbon emissions, 20% more renewable energy production and 20% more energy efficiency. Five years later and with only eight years left to reach 2020, a recent report states we will fall short of some of these objectives. Paradoxically, the economic downturn actually had a positive effect on some of these goals: carbon emissions in 2010 have fallen 14%, due to the production slowdown. The reality is of course that going back to earlier production levels will likely lead to an increase in emissions and, because we have been refraining low carbon investments, this increase will be difficult to avoid.

In the midst of this grim scenario, something stands out: the Covenant of Mayors, a group of more than 4250 European municipalities voluntarily committing to surpassing EU's "20-20-20" targets". In average, these municipalities committed to a 26% decrease in carbon emissions by 2020, 6% more than the EU goal (Exhibit 1).

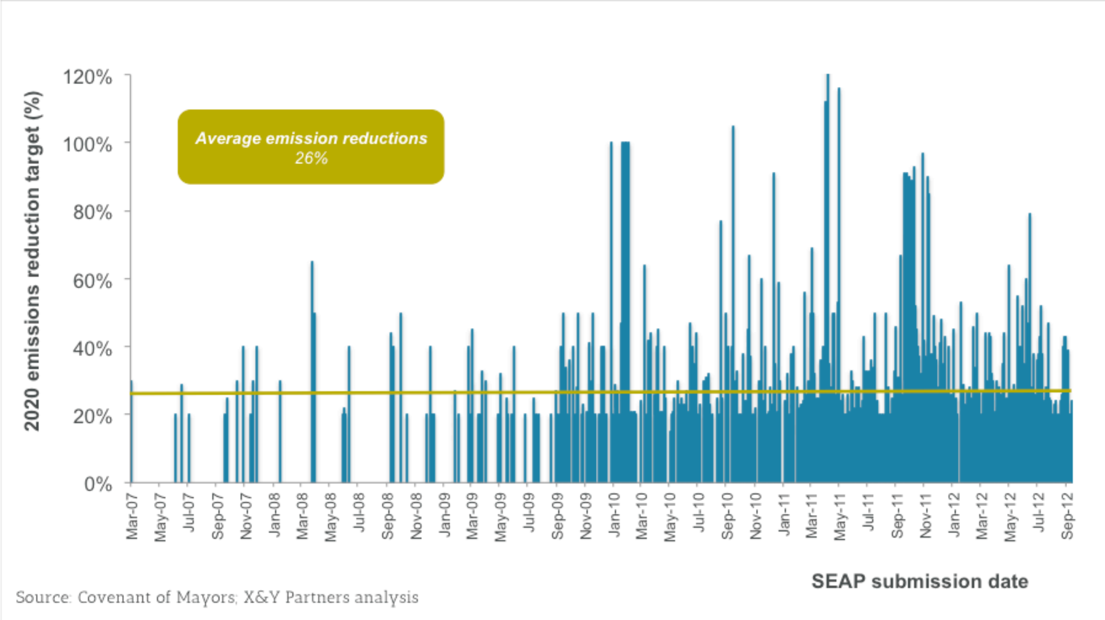

Exhibit 1 - Emission reduction targets for the Covenant of Mayors signatories

Can they do it? They can, but most of them probably will not.

Recently we were asked by Águeda, one of the Covenant of Mayors signatory municipalities, to help them draft their Sustainable Energy Action Plan. Águeda is a small Portuguese municipality with limited access to funds but a sensible approach to the Covenant of Mayors: they want to reach or surpass the 20-20-20 targets exclusively through financially feasible actions (i.e. actions where the associated cost savings surpass the required initial investment).

Águeda's actions target three areas: Energy, Transports and Waste. Similar actions are grouped into initiatives. The T10 initiative (Optimization of Road Infrastructures), for instance, includes the following actions (among others): creation of cycle paths and other infrastructures for bicycle use, creation of infrastructures for vehicles with alternative sources of power (electric cars, natural gas, etc.) and set up of a community transport network.

All of these actions are environmentally feasible i.e. all lead to actual carbon reductions (Exhibit 2). But not all are economically feasible. Initiative T10, for instance, included the creation of a network of gas-powered mini-buses that, in the case of Águeda, lacked scale to be financially viable.

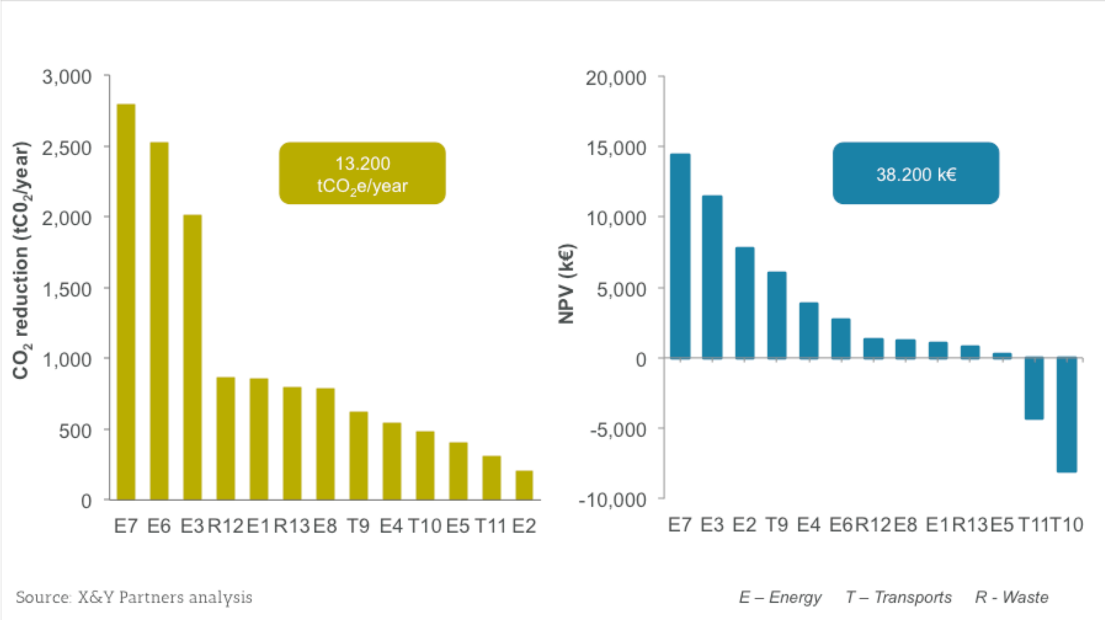

Exhibit 2 - CO$_2$e emission reductions and NPV for all the shortlisted measures

Taking out all financially unviable actions vastly improves the plan's financial attractiveness, with a limited impact on carbon reductions (Exhibit 3). And even with limited investment capacity, financially viable actions can be funded through several mechanisms, such as performance contracts.

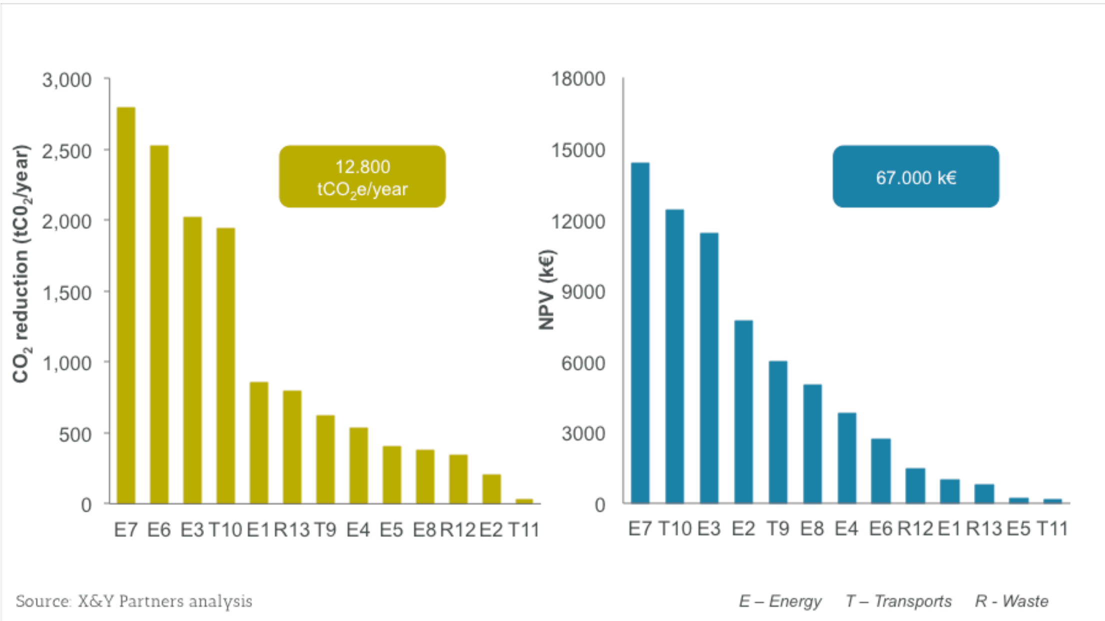

Exhibit 3 - CO$_2$e emission reductions and NPV for all the "financially viable only" measures

With this plan, Águeda committed to a reduction in carbon emissions of 33% by 2020, which is higher than the target established by 88% of all Covenant of Mayors signatories.

Águeda is surely not an isolated case. Other municipalities hold the potential not only to surpass EU’s 20-20-20 targets, but also to do it with significant economic benefits. But will they do it? If you look at the 10 last approved SEAP reports, none of them includes a financial feasibility analysis, and three of them don’t even quantify the investment required to implement the recommended actions. This apparent decoupling between environmental and financial analysis will likely stall or slow down the SEAP implementation. In fact, so far none of the signatories has presented an implementation report.

This is not an insurmountable issue. In fact, the Covenant of Mayor has already accomplished something far more difficult, which was to put 4250 municipalities understanding and quantifying the somewhat opaque notion of carbon emissions. Extending the SEAP requirements to include financial analysis seems easy by comparison, since this is a competence that all municipalities already possess.

This is of course something that makes sense for any plan to reduce carbon emissions or increase energy efficiency, both for public and private organizations. Ultimately, environmental efficiency and economical efficiency boil down to the same thing: producing more with less.

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