



The regional carbon emission monitor

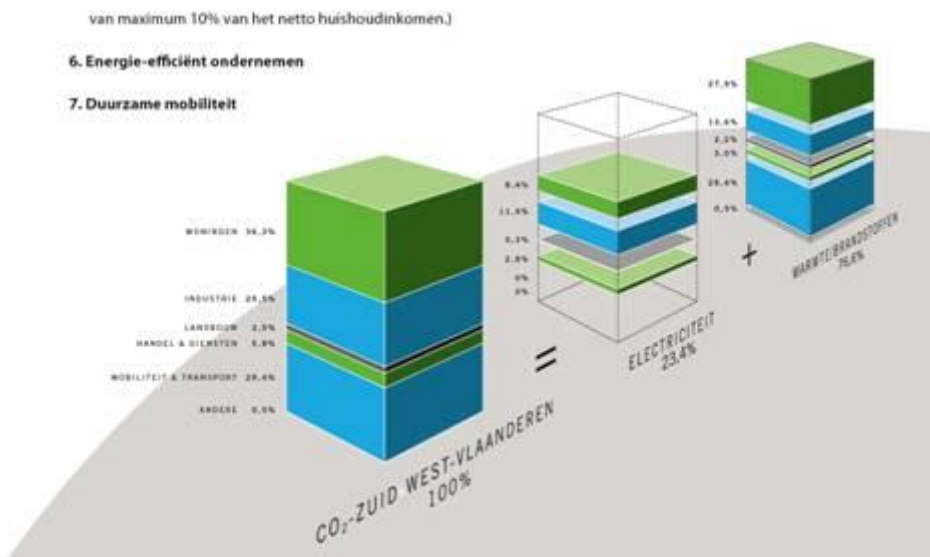
Leiedal set up an instrument to monitor the carbon emissions of the 13 cities and municipalities in the Kortrijk region (BE). Leiedal presented on January 31 2012 the first results. CO₂ monitoring is an excellent indicator for energy consumption, energy efficiency and renewable energy mapping.

1.487 wind turbines

South West Flanders consumes annually 6,261,792,000 kWh of energy. This is the equivalent of 1487 2MW wind turbines. Or 300 times more solar panels than today.

Energy consumption is responsible for most of our CO₂ emissions: from the combustion of fuels in vehicles, for heating, for electricity production ... South West Flanders emits annually 2,111,000 tons of CO₂.

That's 7.1 tonnes per capita. Individuals with their houses the largest energy consumers: 36.3%. Other major users are the mobility and transport sectors (29.4%) and industry (25.5%). Our nature absorbs a small amount of CO₂, accounting for half percent point.



North Sea - Sustainable Energy Planning (SEP)

managed by atene KOM GmbH
Agency for Communication and Public Management

Platz vor dem Neuen Tor 5
10115 Berlin (Germany)

Phone +49 30 6098990-0 (Fax -99)
E-mail northseasep@atenekom.eu
Web www.northseasep.eu

Electricity is responsible for 23.4% of CO₂ emissions, compared to 76.6% by fuels for heating, transport and industrial processes. Most of the electricity is not produced in our region, but we calculate those emissions anyway.

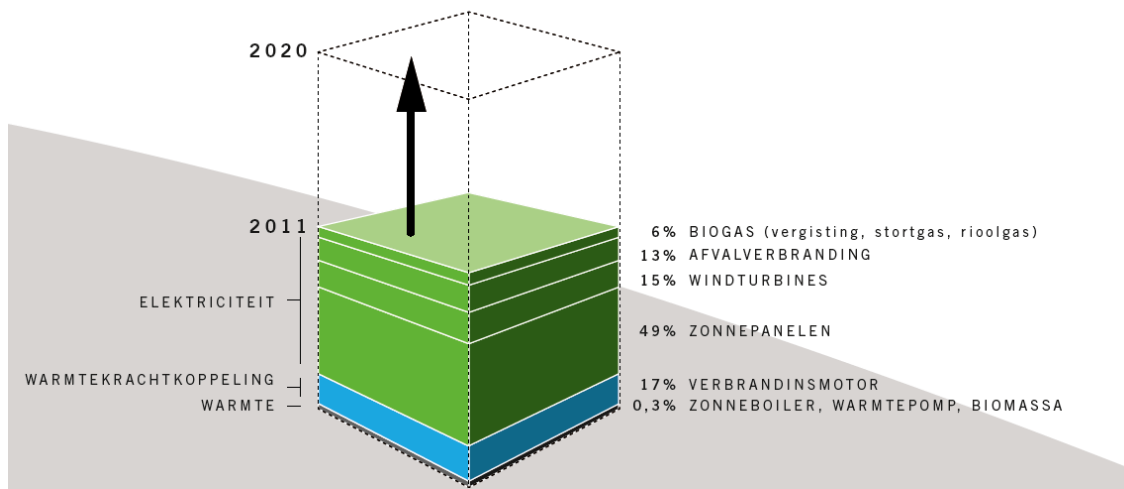
All South West Flemish municipalities are doing a lot better than the Flemish average. The explanation is that we host less energy-intensive industry (e.g. steel industry or petro chemistry). But our challenge is not less significant: our houses are on average worse isolated. And that also applies to new construction!



The monitor is not a report that says whether a municipality is doing well or not. It outlines the state of affairs, showing the status quo, the bottlenecks and provides new insights. The CO₂ emission is not easy to steer. After this baseline will follow within a few years another measurement, which shows us whether we are moving in the right direction.

Renewable energy: solar, wind, waste

The majority of renewable energy in South West Flanders is produced in the form of electricity. At record speed, solar energy has grown into the most important source: half of all renewable energy, followed by wind energy, energy from waste incineration, and biogas. There is little use of renewable heat (heat pumps, solar water heaters ...). All in all renewable energy is still relatively modest, accounting for 1.5% of total consumption.



A municipal CO₂ monitor?

The initiatives that a municipality does, do they matter? Leiedals CO₂ monitor also allows calculating the footprint of the local government. What is the emissions from municipal buildings, public lighting, service relocations, the waste? What is the positive impact of solar panels, wood pellet, etc.?

Municipalities can thus evaluate their efforts: the effects of boiler room renovations, renewable energy, efficient public lighting, a more sustainable commute ... Or he may uncover the municipal problems. Simultaneously, it is a communication tool.

Ideally, municipalities develop their own energy and climate plan attached to the monitor, and determine actions and quick wins. Because energy costs the municipality more money!

Leiedal will invite the municipalities to provide the necessary data collection and processing them into the instrument.

Region CO₂ neutral by 2050

South West Flanders (the Kortrijk Region) is committed to a sustainable energy policy. Therefore, the region develops in the context of the regional energy strategy, a keen ambition: completely CO₂ neutral by 2050. But we begin contributing to -30% CO₂ in the EU by 2020.

Does this mean that there should be build 1,483 wind turbines? That would be a mission impossible. Yes, there will be more renewable energy to be produced. But also thinking of renewable energy from the sun (solar), soil or air (heat pumps) or wood pellet (biomass).

Renewable energy is finally only the icing on the cake. The European Union

expects by 2050 to reduce energy demand by 80%. In this way it becomes a lot easier for all energy needs with renewable energy form.

Energy efficiency for South West Flanders, the challenge for the coming decades, partly due to lack of local renewable energy sources. The house of the future is energy neutral, and is required by 2021. This is a big step, but remember that the past 10 years we have also succeeded in the sensitive energy to drive.

7 strategic objectives

The European energy goals are our main support. Therefore we want to:

- achieve Europe's energy efficiency goals accelerated
- anticipate on future goals

The overall mission to be energy neutral by 2050 is refined by 7 strategic objectives:

1. All buildings energy neutral from 2050 (the 145,000 buildings in the region in 2050 "almost energy neutral", cf. European standard)
2. More renewable energy (5x more renewable energy in the region by 2020 (compared to 2010), but also more renewable energy consumption)
3. Public authorities set an example (Local governments are CO₂ neutral within 25 years)
4. Competitive energy prices (electricity and heat prices are competitive, so similar to elsewhere in Flanders and neighboring countries)
5. No energy poverty (South West Flanders wants to expel energy poverty and seeks to exclude energy costs of up to 10% of net household income.)
6. Energy-efficient business
7. Sustainable mobility

Fine Tuning

These figures are calculated on the basis of 2009 emissions by energy consultancy 3E and after a few years will again be measured. The CO₂ monitor is further refined so that other greenhouse gases will be charged as CH₄, N₂O, SF₆. These gases will be calculated in CO₂ equivalents. We expect the impact will be minor.

The CO₂ monitor was made within the Interreg IVb project 'North Sea SEP project.' For more information, contact [dominiek.vandewiele @ leiedal.be](mailto:dominiek.vandewiele@leiedal.be)