



## Case 1 Graz, Austria:

### Graz public-private partnership programme ECOPROFIT, 1990

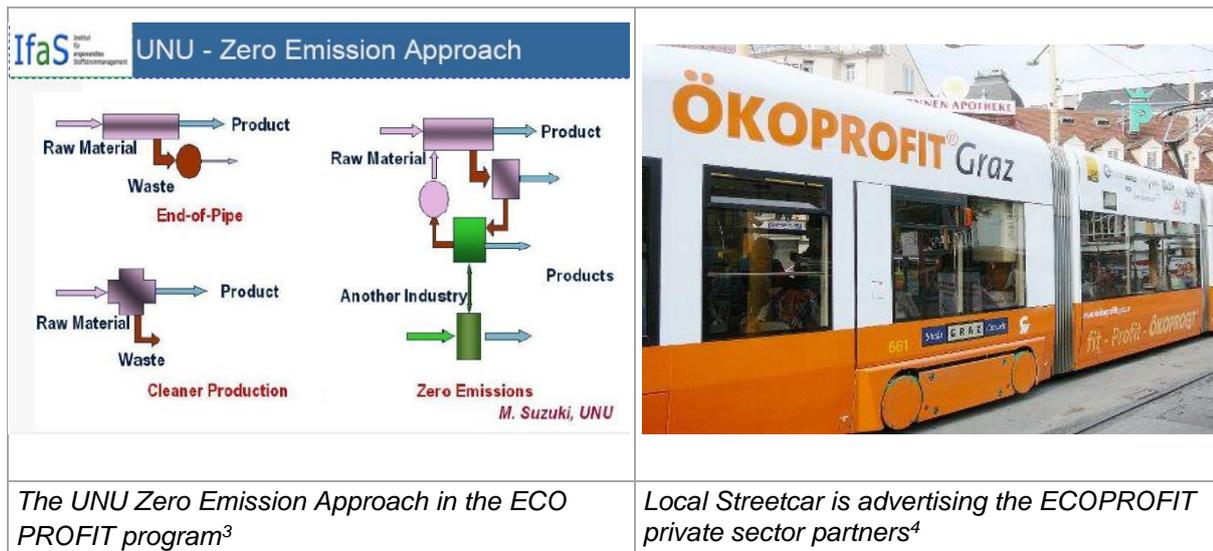
#### Problem to resolve<sup>1</sup>

The city of Graz with about 250.000 inhabitants is situated in a basin shape topography. At the same time Graz is an important industrial area. The combination of these two conditions, associated with inversion weather, used to cause heavy smog especially in winter. Smog is partly caused by excessive burning of non-renewable energy and therefore, in 1989, the municipality decided that it was time for a change and started an initiative to 'purify' industrial energy use within the city. A public - private partnership programme was born and given the name ECOPROFIT. The objectives of the program was to reduce emissions and increase resource efficiency through measures inside the companies - allowing cost savings in the production line as well as achieving the Kyoto environmental targets.<sup>2</sup>

#### How does it work?

Since both, smog and high-energy consumption directly relate to efficiency of production processes, the municipality's central strategy was to convince the private sector companies to invest in cleaner energies and in energy savings. In fact, the Graz experience shows that 50% of those investments have amortized in less than 2 years!





The financial resources for an ECOPROFIT project (for consultants, project management, training and quality assurance) come from municipality and companies. Usually the municipality supports two thirds of the project, which leaves one third for the companies. Because of the win-win effects on economy and environment there is a high potential for financial support of the government like in Bavaria (Germany), where the government supports the company's part of the financing. The financial resources for the implementation of measures in the companies come from the companies. Amortization time is in 50% of the measures below two years. Companies get their financial inputs back with the factor 1:10 because of cost-savings and efficiency increase.

## Results

The main success so far has been the transfer of ECOPROFIT to more than 1000 companies that participate in about 50 cities of the world. The results of the project that were experienced over 10 years in Graz: 105 companies of 38 different branches that participated within the last 10 years achieved cost savings of 22 Million Euro and an economical growth up to 15% per year with municipal assistance of about 1.5 Million Euro and own efforts of about 0.75 Million Euro. They reached a reduction of eco-related expenses for energy, water, waste, emissions' of partly about 70%. That means a factor of about 1:10 if you compare the companies inputs with the output of the project (cost-savings). The reasons for this enormous factor are the ECOPROFIT know-how and the low consulting costs that are shared between the municipality and the company as well as among the companies. The results were measured and analysed before and after each measure.

The environmental success is remarkable: savings of

- Raw materials 15,000 t,
- Solvents 580 t,
- Municipal waste 4,500 t,
- Hazardous waste 1,000 t,
- Water 900,000 m<sup>3</sup>,
- Electricity 20,000 MWh,
- Heat energy 50,000 MWh,
- Natural gas 3,000,000 m<sup>3</sup> and
- Oil 500 t.

ECOPROFIT substantially contributed to the attainment of the target in Graz, **to stop the smog**. That has been yielded in the winter 1995/96. Since then in Graz there has not been any smog any more.

The extraordinary success of the ECO PROFIT program already convinced more than 60 cities to adopt the program for their own purposes – involving more than 1000 companies. →**Tool URR 1**

## Credentials

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## References

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- <sup>1</sup> [www.pri.org/stories/2014-12-05/its-not-just-bikes-green-rooftops-make-copenhagen-greenest-green-cities](http://www.pri.org/stories/2014-12-05/its-not-just-bikes-green-rooftops-make-copenhagen-greenest-green-cities)  
[www.pri.org/stories/2014-12-05/its-not-just-bikes-green-rooftops-make-copenhagen-greenest-green-cities](http://www.pri.org/stories/2014-12-05/its-not-just-bikes-green-rooftops-make-copenhagen-greenest-green-cities) , viewed 21/07/2015
- <sup>2</sup> [http://ec.europa.eu/clima/policies/gas/kyoto/index\\_en.htm](http://ec.europa.eu/clima/policies/gas/kyoto/index_en.htm) The project that were experienced over 10 years in Graz: 105 companies of 38 different branches that participated within the last 10 years achieved cost savings of 22 Million Euro and an economical growth up to 15% per year with municipal assistance of about 1.5 Million Euro and own efforts of about 0.75Million Euro. They reached a reduction of eco-related expenses for energy, water, waste, emissions' of partly about 70%.  
[a.eu/clima/policies/g-gas/kyoto/index\\_en.htm](http://ec.europa.eu/clima/policies/gas/kyoto/index_en.htm) seen 15/07/2015
- <sup>3</sup> Source: [http://www.tf.uns.ac.rs/tempusIV/documents/presentations/04/GE-10-2010-04\\_Retraining\\_Industrial\\_%20MFM.pdf](http://www.tf.uns.ac.rs/tempusIV/documents/presentations/04/GE-10-2010-04_Retraining_Industrial_%20MFM.pdf), visited 16/07/2015
- <sup>4</sup> Source:  
[https://www.google.com/search?newwindow=1&biw=1067&bih=539&site=imghp&tbn=isch&sa=1&q=%C3%B6koprofit+graz&oq=%C3%B6koprofit+graz&gs\\_l=img.12...2524.3058.0.6201.2.2.0.0.0.103.198.1j1.2.0....0...1c.1.64.img..2.0.0.xcJ7zFpFiJ0#imgrc=IOvPiHNYfsIX8M%3A](https://www.google.com/search?newwindow=1&biw=1067&bih=539&site=imghp&tbn=isch&sa=1&q=%C3%B6koprofit+graz&oq=%C3%B6koprofit+graz&gs_l=img.12...2524.3058.0.6201.2.2.0.0.0.103.198.1j1.2.0....0...1c.1.64.img..2.0.0.xcJ7zFpFiJ0#imgrc=IOvPiHNYfsIX8M%3A)