

CASE STUDY: Vienna Climate Protection Programme, KLIP

SECTOR: Climate Protection, Energy, Mobility, City Management
COUNTRY: Austria

BACKGROUND

The Climate Alliance agreed to reduce by half the carbon dioxide emissions (in terms of the 1987 level) and to entirely stop the production and use of CFCs by 2010. The KLIP is also based on Agenda 21, which commits members cities to careful and responsible use of our nature and resources.

The KLIP Climate Protection Programme incorporates 36 realistic packages that cover district heating, energy generation, housing mobility, city management and business enterprises. Each of these packages receives its moments from a number of specific projects.

The origins of KLIP

In 1995, the Municipal Department 22 – Environmental Protection launched its preparatory work for a Climate Protection Programme (known under its German acronym KliP) for the city of Vienna. In 1996, the Council Committee for Environment and Traffic Coordination unanimously approved the Programme. In October 1996, KliP was first presented to the public. The first phase of KliP consisted of a stock-taking process: existing concepts and proposals were reviewed and evaluated, including in particular the CO² reduction strategy schemes prepared by the Environmental Protection Department, which had been completed in 1995. The administrative departments were supported in their tasks by two external bodies: Energieverwertungsagentur (EVA, the Austrian energy utilisation agency) and Interuniversitäres Forschungszentrum für Technik, Arbeit and Kultur (IFZ, an inter-university research centre for technology, labour and culture, domiciled in Graz). They were charged with preparing the

groundwork for information provision, advising and supporting the Environmental Protection Department in technical terms, and generally with handling and managing the KliP process.

KliP is an ongoing process

The programme was developed by more than 300 participants from over 150 institutions, among them departments of the Vienna City Administration, municipal operations and external organisations (interest groups, NGOs and private business representatives).

Modular system

The KliP was designed as a system of modules to be contributed by each administrative department, private initiative or private player. Where necessary, the KliP project organisers supplied their organisational and PR expertise to assist in the development of individual modules.

New approaches to project organisation

New approaches had to be created for organisation, to take into account and empower the large number of players involved in KliP. Initially, three KliP teams were established to cover procurement/waste, mobility and energy respectively. Actual practical work was carried out by eleven small but highly efficient KliP project groups, which dealt with a number of subjects. These project groups included experts from the municipal departments and other bodies from within and outside the Vienna City Administration, supported where required by other experts.

The KliP teams and project groups provided a platform to propose policies and elaborate on them, to develop tools for their implementation and to ensure their practical realisation.

The complex process has now produced a climate protection programme which

identifies the climate policies to be translated into practice by the City of Vienna up to 2010. The KliP action programme, adopted by the Vienna City Council in November 1999, defines the guidelines for effective climate protection in Vienna. It specifies the first concrete steps to be taken over the next two years, as well as more long-term measures envisaged to be carried out up to 2010. The programme also indicates tools and accompanying measures which are required for its practical implementation. Realistic milestone schedules ensure that the required framework will be created in good time. Similarly, the programme outlines methods for regular progress monitoring. Thus, an environmental report will document how measures affect the CO² Balance in Vienna and which tools may have to be modified. The action programme also contains proposals for organisations structures that enable progress for KliP even without external support (EVA, IFZ). But KliP was never designed to be restricted just to developing concepts. The intention was rather to implement short-term measures as quickly as possible, and consequently, several projects have already been put into effect.

Boosting energy efficiency and exploiting renewable energy sources

KliP awards top priority to efforts to improve energy efficiency at the consumer level and to the use of renewable energy sources as the most economic and effective means to reduce pollution and greenhouse gases. This strategy involves cutting thermal losses in buildings, avoiding traffic and procuring more efficient vehicles and equipment.

Successful projects in Vienna

The clear-cut objectives identified by the Climate Alliance have been incorporated in framework schemes, such as the traffic concept or energy concept for the City of Vienna. In addition, numerous

concrete projects have already led to a cut in CO² emissions:

- Extension of district heating and natural gas, both of them line-bound energy carriers;
- Efficient heat and power generation in cogeneration plants;
- Scaled up use of natural gas in power plants
- Year-round use of heat generated by incinerators;
- More stringent requirements for thermal insulation in residential buildings;
- No purchase of tropical timber
- Voluntary ban on halogenated hydrocarbons (H-CFCs and H-FCs) in construction material;
- Collection and use of landfill gas generated at the Rautenweg landfill;
- Cooperation with companies within the scope of the Eco Business Plan;
- Energy accounting for municipal buildings;
- Energy contracting projects;
- Enforced introduction of environmental management systems;
- Use of an eco truck simulator for the municipal fleet;
- Bonus system as an incentive for energy saving at Vienna's schools;
- Internet exchange for second-hand goods.

The future of KliP

Provided that all KliP programmes are implemented, some 2.8 million metric tons of carbon dioxide emissions can be avoided in 2010, as against projected figures. Compared to 1987 levels, this should trim CO² emissions by 1.4 million metric tons, i.e. a minus of 18%, which would make for a per capita reduction of 25%. In other words, in spite of the ambitious KliP programme, no optimistic-realistic scenario can predict a 50% reduction by 2010. Nevertheless the Climate Protection Programme shows the way for a substantial improvement compared to the predicted trend.

Priorities for CO² reduction

Any climate protection policy worth its salt needs to define priorities so as to achieve its goals with the lowest possible financial input. Priorities must identify measures which can produce maximum CO² savings at minimum cost. For the energy and procurement sectors of KLiP, emphasis must therefore be placed on eliminating H-CFCs and H-FCs from municipal procurement – a measure that impacts on quantities and is at the same time relatively inexpensive compared to other climate protection measures. The mobility programmes were evaluated by qualitative criteria. Here, top priority was awarded to the programmes for a liveable town, for giving a boost to walking and cycling, for awareness-building programmes and for schemes for ecological and economic driving.

Packages of the KLiP Programme

District Heating and Electricity Generation

Cogeneration plants: more efficient fuel use in thermal power plants.

Ecological electricity: power from renewable energy sources.

Ecological district heating: heat from renewable energy sources and waste heat.

Housing

Construction climate: ban on halogenated hydrocarbons.

Thermal profit: optimum thermal insulation for 220,000 housing units.

Vienna heat: district heating for 180,000 housing units, natural gas for 40,000 units, stronger emphasis on biomass and solar energy, replacement of obsolete boilers.

New housing: reduction of heating energy requirements in new units.

Vienna saves power: more efficiency in electricity services. Substitution of electricity when possible.

Mobility

Next step: implementation of urban planning targets identified in the urban development plan.

Climate-focused subsidies: emphasis on traffic-prevention structures.

Liveable city: more spaces for pedestrians and cyclists, more green spaces, more slow-traffic zones.

Walking in Vienna: raising the share of footpaths by 6% to 24% in 2010.

Coasting along: raising the share of cycle paths to 8%, network of cycle paths extended to at least 800km by 2010 (already achieved in 2000, further extensions envisaged).

More public transport: raising the share of public transport from 37% (1995) to 43%.

Mobility pool: 2,500 car-sharing vehicles to replace 15,000 private passenger cars, available from a dense network of locations. About 50,000 citizens to participate in car-sharing.

Mobility consulting: 300 major businesses, 600 school classes and three quarters of the municipal departments obtain mobility consulting services and take action.

Awareness building: PR programme supports implementation of KLiP projects and traffic concept.

Economical driving: wide-ranging training programme to teach efficient driving styles.

City logistics: bundling of supplier services to shopping streets.

Car pooling: 10% of car commuters should join car pools.

Lower car emissions: reduction of CO² emissions from passenger cars by 30% , from trucks by 7% and from public means of transport by 10%.

Efficient municipal fleet: purchase of fuel saving new vehicles for regular replacement.

Alternative resources: 1% of all car mileage for the transport of people or goods in Vienna uses alternatively powered vehicles.

True costs: coverage of user caused costs by the gradual raising of associated taxes and fees.

City Management

Municipal climate protection: reduction of energy use for heating by at least 10%; stabilising electricity consumption (1995 level); ongoing switch to district heating, renewables and natural gas.

Mobile municipality: mobility-related activities in city management.

Ecologic: consideration of environmental protection in planning and tendering works and services rendered for the city of Vienna.

Eco-management: sweeping introduction of environmental management systems at the municipal departments.

Eco-food: raising the share of food grown on monitored organic farms and dispensed by municipal organisations; events organised with emphasis on protecting the environment and climate.

Business

Thermoprofit: optimum thermal insulation of one third of the facilities built before 1980.

Vienna heat: more promotion of district heating, natural gas and biomass for heating, solar energy for water heating, exchange of obsolete boilers.

New workplaces: reducing heating energy requirements in new company buildings.

Vienna saves power: more efficiency in electricity services, substitution of electricity when possible.

Ecoprocess: boosting efficiency, changing energy sources for industrial production.

Construction climate: total ban on construction materials using H-CFCs and -FCs, resources and recycled materials.

DRIVERS

The KliP was drawn by the Environment Protection Department of the City of Vienna, in close cooperation with Energy Use Agency (EVA). Since 2001, KliP is supported by a special department for Climate Protection to ensure the regular implementation of activities.

REFERENCES

(will be completed)

<http://www.klip.at/english>