



## UPPER AUSTRIA'S 'TAMBOURINES'-LED HEATING TRANSITION

### CASE STUDY | HOW UPPER AUSTRIA IS TACKLING HEATING EMISSIONS THROUGH AWARENESS RAISING AND CAPACITY BUILDING

This case study shows how the state of Upper Austria is activating both the consumer and supply sides through information and capacity building measures to reduce greenhouse gas (GHG) emissions from the heating sector. It is part of the [Energy Transition Platform](#), a global initiative supporting highly industrialized, carbon-intensive state and regional governments in developing and implementing innovative clean energy policies to accelerate the low carbon transition.

The partner regions of the Energy Transition Platform – Alberta, the Basque Country, California, Hauts-de-France, Lombardy, Minnesota, North Rhine-Westphalia, Silesia, South Australia, Upper Austria and Wales – come together to learn from their global peers, to build strong partnerships and to jointly overcome barriers to the adoption of clean energy models. The Energy Transition Platform is part of the [States & Regions Policy Innovation](#) program and was launched by The Climate Group, alongside the initiative's lead government, North Rhine-Westphalia, and Stiftung Mercator, in early 2016.



Linz, Upper Austria



### ACTIVATING THE SUPPLY AND DEMAND SIDES FOR A HEATING TRANSITION

In Europe, the heating sector is the biggest consumer of final energy (50%), of which 75% is sourced from fossil fuels. It is also one of the fastest growing contributors of emissions, despite the fact that reducing GHG emissions from heating through efficiency measures represents a net-negative cost mitigation option. The transformation of the heating market is therefore a key aspect of a successful energy transition.

Between 2003 and 2014, the state of **Upper Austria managed to reduce emissions from buildings by 42%**, an achievement largely due to the innovative approach favored by the government and its implementing body for energy policies - the Upper Austrian Energy Agency (*OÖ Energiesparverband*).

This approach is based on the implementation of policy packages that bring together financial incentives (e.g. grant programs for retrofitting), regulatory measures (e.g. dynamic standards for building efficiency) and a third, often neglected pillar: **information, awareness raising and capacity building programs**. Together, these three pillars form Upper Austria's **'sticks, carrots and tambourines' policy approach**.

The application of the 'tambourines' pillar to the heating sector was presented in an online Peer Forum of the Energy Transition Platform in October 2016 by Christiane Egger, Deputy Manager of the Upper Austrian Energy Agency.

## SPOTLIGHT ON UPPER AUSTRIA



#### GOVERNOR

JOSEF PÜHRINGER (AUSTRIAN PEOPLE'S PARTY, ÖVP)

#### GDP

€54.8 BILLION (2013)

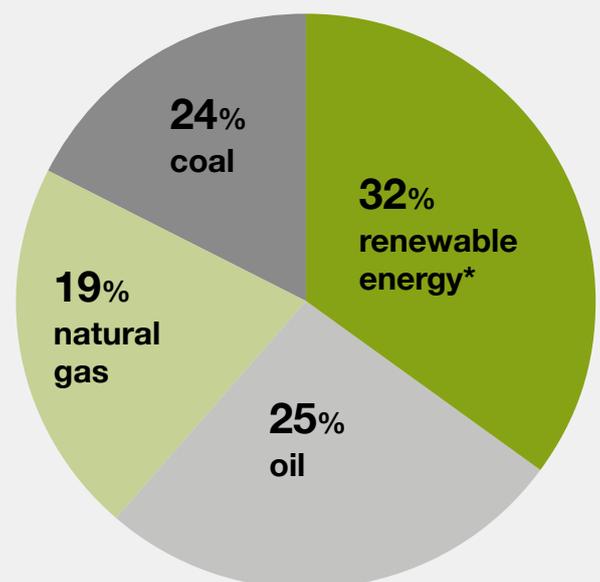
#### POPULATION

1,44 MILLION (2014)

#### SPECIFIC FEATURES

Leading Austrian state in terms of industry, exports (25% of Austrian exports) and technology – numerous industry networks and clusters, e.g. clean-tech (energy and environment) automobiles, plastics

### ENERGY CONSUMPTION MIX (2014)<sup>1</sup>



\* 16% biomass, 11% hydropower, 5% other renewables

<sup>1</sup> <http://www.energiesparverband.at/english/energy-in-upper-austria/energy-strategy-energy-future-2030.html>

**UPPER AUSTRIA'S 'TAMBOURINES'-LED HEATING TRANSITION:** UPPER AUSTRIA IS IMPLEMENTING EXTENSIVE INFORMATION AND EDUCATION PROGRAMS TO ACTIVATE BOTH THE DEMAND AND SUPPLY SIDES IN ORDER TO TRANSFORM THE HEATING MARKET. ON THE DEMAND SIDE, IT INCLUDES AN *ENERGY ADVICE* PROGRAM FOR ALL BUILDING OWNERS, WHILE THE SUPPLY SIDE IS BEING ENGAGED THROUGH CAPACITY BUILDING PROGRAMS FOR SUPPLIERS AND STUDENTS (*ENERGY ACADEMY* AND *PROFESSIONALS OF TOMORROW* PROGRAMS).

### FRAMEWORK

Upper Austria aims to transform the heating market through the implementation of a holistic policy package made up of three equally crucial pillars: **carrots** (financial incentives, such as subsidies), **sticks** (regulatory measures, such as energy efficiency standards) and **tambourines** (information and education measures targeting supply and demand).

The 'tambourines' programs are implemented by the Energy Agency (*OÖ Energiesparverband*), a product-independent information and technical expertise hub established by the regional government.

Some of the programs (including the *Energy Academy* and the *Professionals of Tomorrow* program) are embedded into the region-wide **Cleantech-Cluster**, a professional network of 160 businesses from the renewable energy and energy efficiency sector along the entire supply chain.

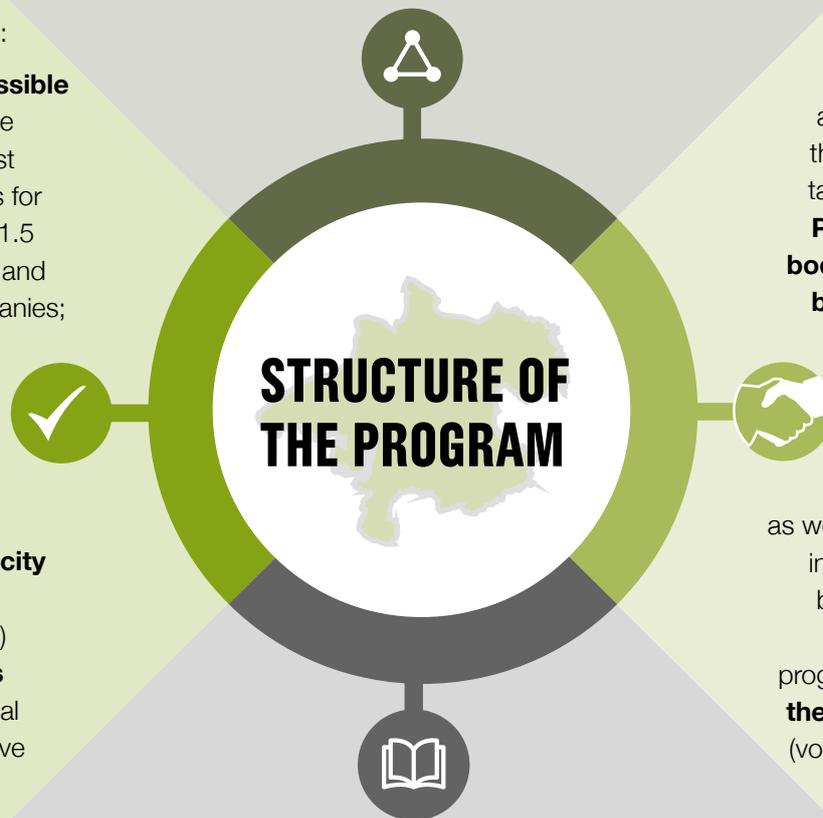
### BENEFITS

The 'tambourines' programs:

- Provide **financially accessible** support and expertise. The state covers the entire cost of *Energy Advice* sessions for private consumers (up to 1.5 hours) and public bodies, and 75% of the cost for companies;
- **Reduce fuel poverty and enhance competitiveness** by decreasing heating energy costs;
- Support **long-term capacity building, innovation and job creation** (supply) and **behavioral changes** (demand), which are crucial to achieve a comprehensive market transformation.

### STAKEHOLDER INVOLVEMENT

Upper Austria's 'tambourines' policies target a wide range of stakeholders through a variety of programs tailored to specific audiences. **Private households, public bodies** (e.g. municipalities) and **businesses** can benefit from the *Energy Advice* program, while stakeholders along the whole supply chain (from **manufacturers** to **installers** and **architects**, as well as **banks**) can participate in the training courses offered by the *Energy Academy*. The *Professionals of Tomorrow* program targets **students from the higher education system** (vocational schools, universities and technical colleges).

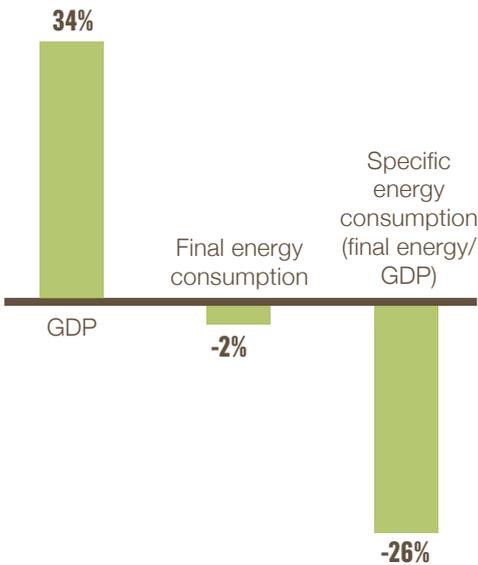


### SERVICES AND RESOURCES PROVIDED

- **Face-to-face advice sessions** to support consumers' investment decisions related to building renovation, new construction, choice of heating systems or funding schemes (*Energy Advice* program);
- **Trainings provided** by experts from the Energy Agency and representatives from the private sector on topics such as energy management for businesses, solar energy storage, biomass heating or thermal isolation. Some training programs offer certification for participants (*Energy Academy*);
- **Company tours, site visits** and **master thesis placements** for students (*Professionals of Tomorrow* program);
- A number of **professional networks**, including the Cleantech-Cluster;
- The **Energy Agency's website** provides extensive content for all stakeholders, notably informational brochures and videos for businesses and private homeowners on topics such as renewable energy sources for heating, energy certificates, renovation or zero-emissions buildings.

## GDP/ENERGY 'DECOUPLING'

Between 2005 and 2014, Upper Austria's economy grew, while its energy consumption decreased.



Having an independent agency/body that does not have any commercial involvement is key in building trust with customers and suppliers, as well as advocating action on energy efficiency.

### POLICY TIP

## STAKEHOLDER OUTREACH

Reaching stakeholders that may not otherwise be looking for existing information can sometimes be challenging. The Energy Agency uses a network of partners (such as public bodies and banks) and trade-shows to communicate on its programs. For example, 200 bank employees were trained to be able to provide information on the *Energy Advice* program to their clients.

## UPPER AUSTRIA'S 'TAMBOURINES'-LED HEATING TRANSITION

### WHAT IS THE PROGRAM AIMING TO SOLVE?

Taking into account the **heating sector's large share of GHG emissions** in Upper Austria, reducing emissions through decreased demand for heating energy and fuel-switching to low carbon sources (such as high-quality biomass) is crucial. In addition, the implementation of cleaner, more efficient heating systems avoids **particulates emissions** and ensures better air quality for Upper Austria's citizens.

The programs are not only aiming to solve an environmental question, but also an economic one: addressing the efficiency of heating systems can significantly **decrease the cost burden of energy for consumers**, both private households and businesses. It's also an opportunity for businesses to improve their competitiveness by developing and implementing best available technologies.

More specifically, the 'tambourines' intend to solve the key issues of a **lack of awareness on the demand side and a lack of expertise on the supply side** – issues that can hinder the impact of incentives and regulations.

### HOW IS IT INNOVATIVE?

While financial incentives and regulatory requirements are commonly used in climate and energy policies, they are rarely linked and aligned with the third pillar – awareness raising and education. This can make or break a policy: strong loan or grant programs to renovate dwellings or switch to renewable district heating systems will not have the expected impact if they're not associated with **wide but targeted communications and capacity building campaigns**. Offering solutions only works if people are made aware of their existence.

In addition, Upper Austria's double approach – engaging both the demand and supply sides – creates a virtuous cycle whereby educated consumers activate their suppliers, and trained suppliers are able to offer innovative, low carbon solutions to their customers. This is enhanced by the fact that **the supply side is engaged across the whole supply chain** (including manufacturers, installers, architects and banks).

### HOW LONG DID IT TAKE TO IMPLEMENT?

The Energy Agency was set up in 1991, and the *Energy Advice* program was one of its first mandates. Because the Energy Agency was backed by sufficient resources and political support, the other 'tambourines' (*Energy Academy* and *Professionals of Tomorrow*) could be implemented in **a few years**.

However, having a strong leading/implementing body is an absolute prerequisite to be able to implement programs quickly.

It is also crucial that communication and education programs run for a sufficient period of time – a minimum of 3 to 5 years – so that there is enough time to develop networks, reach out to stakeholders and get substantial, long-term results.

The different elements of the policy package must be synchronized as much as possible. For example, it is most effective to implement an information campaign at the same time that a funding program is launched.

### POLICY TIP

**“OUR ENERGY ADVICE PROGRAM IS SUCCESSFUL BECAUSE CONSUMERS KNOW WE ARE COMMERCIALY INDEPENDENT AND ONLY HAVE THEIR INTERESTS AT HEART. WE TRULY WANT TO TRANSFORM THE HEATING MARKET. THIS IS A KEY ELEMENT HIGHLIGHTED IN THE SURVEYS WE HAVE CONDUCTED AMONG BENEFICIARIES OF THE PROGRAM.”**

- Christiane Egger, Deputy Manager, Upper Austrian Energy Agency

When developing ‘tambourines’ and ‘carrots’, it is important to focus initially on low-hanging fruits to develop measures and target stakeholders with the biggest impact.

**LESSON LEARNED**

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**HOW IS THE PROGRAM FINANCED?**

Most of the programs’ costs are linked to staff: The Energy Agency employs 50 energy advisers with various technical backgrounds to provide targeted energy advice and training.

All the programs are financed through the general budget of the region.

**WHAT WERE THE MAJOR CHALLENGES AND HOW WERE THEY OVERCOME?**

One of the challenges met by the Energy Agency when implementing its ‘tambourines’ activities was in providing **long-term vision and stability**: as the market keeps evolving and new technologies fall in and out of favor, it is crucial for the Agency to be aware of the changes and adapt messaging and actions to ensure continuous support to consumers and suppliers.

**RESULTS TO DATE**

Although it is difficult to quantify the heating emissions that were directly avoided through the ‘tambourines’ programs of Upper Austria, the 42% emissions reduction in buildings between 2003 and 2014 shows the overarching success of the policy package. More than 2,000 modern biomass heating systems and around 1,700 heat pumps were installed in 2015.

Some results of the information and education programs include:

- more than **10,000 face-to face sessions** per year offered within the *Energy Advice* program and over **115 companies** advised;
- about **30 training courses per year** conducted by the *Energy Academy*.

**CONNECT WITH UPPER AUSTRIA**

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**CONNECT WITH US IF YOU WANT TO KNOW MORE ABOUT THE ENERGY TRANSITION PLATFORM**

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