

REFUND +

Qualitative assessment of direct fiscal measures

Study of the Austrian case Market experts

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E-mail : lukas.kranzl@tuwien.ac.at

Website : www.eeg.tuwien.ac.at

I. Context and Objectives

1. Context

1.1 Financial incentives for RES heating systems in private homes

Generally, four authorities offer subsidies for RES heating systems in Austria. They differ from province to province and municipality to municipality. Different heating systems attract different levels of subsidy. The subsidies differ also between new buildings and retrofitting. Furthermore subsidies differ, whether solar panels are used for heating water or for boosting the heating system. Moreover, they differ between types of biomass boilers and between mono- and bivalent heat pumps.

Table 1: Overview: instruments of financial incentives

Authority	Kind of support	Relevance (due to amount)	Solar panels	Heat pumps	Biomass boilers
Federal ministry of finance	Income tax allowance	low	X	X	X
Federal Climate- and energy funds ¹	Direct grants for biomass boilers	middle	-	-	X
Provincial governments	direct grants (different in every province)	high	X	X	X
Provincial government	Cheaper loan for building or retrofitting (different in every province)	high	X	X	X
Municipalities	Direct grants (different in every municipality)	low -middle	X	X	X
Municipalities	Cheaper loans for building or retrofitting (quite rare)	low - middle	X	X	X

1.2 Provincial government subsidies

The most relevant support measures for all three types of RES heating systems are the provincial government's subsidies. These recover 20 to 30% of the investment costs and have a ceiling of 1,100 to 2,900 Euro, depending on the technology (higher ceiling for biomass boilers). These subsidies have not been modified for at least 6 years.

¹ <http://www.klimafonds.gv.at/>; 15.03.2008

1.3 Municipalities subsidies

These subsidies vary from zero to more than 1,000 Euro. Each municipality decides for itself whether and with which amount RES heating systems will be subsidised. The criteria for subsidies are often connected with those of the provincial government, which means if someone receives subsidies from the provincial government, the municipality will agree the subsidy without further checks. Subsidies from municipalities are either a fix grant or a percentage of the provincial government's grant.

1.4 Federal subsidies

In the year 2008 the Austrian "Klima- und Energiefonds" implemented a new biomass investment subsidy. Additional to the provincial and municipality subsidies 800 Euro are granted for pellet boilers and 400 Euro for wood chips and wood log boilers. The promotion scheme lasts until the end of the year 2008. Yet, it is not clear whether policy is willing to prolong this instrument.

1.5 Fiscal measures in Austria

In Austria, the fiscal measure which enables buyers to receive a tax rebate when purchasing solar panels, heat pumps or biomass boilers, is defined as a tax allowance.

Applicants can account for those expenses in a rubric called "special expenses" in their tax returns. "Special expenses" may include, for example private retirement pension expenses and new shares. One of the possible expenses are special expenses for creating or retrofitting living space. This includes all kinds of heating systems. The maximum sum for "special expenses" - the sum of all single expenses - is limited to 2,920 Euro per person per year. This sum is divided by four and this amount will reduce the assessment basis for the calculation of income tax. This means this amount of income is tax free. The tax, calculated for this amount of income, is refunded.

Only the person who paid the costs of the heating system is allowed to take it into account when filling in the tax return sheet.

If you take out a loan to finance your expenses (for example when building a house), you can take into account the annual instalments as "special expenses" every year, until the loan is repaid. In this way you can use this tax allowance more often.

"Special expenses" can be used by people whose income is between 10,900 and 50,900 Euro per year. Those, who's income is higher, cannot use "special expenses". Those, whose income is lower do not pay any income tax at all (they get back the

whole income tax at the end of the year). So they do not have an advantage out of “special expenses”.²

Statistics of applications for tax returns

On average, more than 3 million people apply for a tax allowance per year (in the year 2001: 3.09 million).³ This is about 50% of all tax payers (workers, employees, retirees)⁴. In 2004, 1.06 million applications for “special expenses” concerning creating or retrofitting living space were handled.⁵

More detailed information about problems with official statistics about tax allowances and the costs related with the tax allowances are given in the country report “Quantitative and economic assessment of the direct fiscal measures – Study of the Austrian case” within the project REFUND+.

2. Methodology

Six interviews were carried out with marketing experts of companies producing and / or dealing with biomass heating systems, heat pumps or solar thermal systems. Some of the interviewees are active in one of these fields, some in more of them. The interviews had a length between 30 and 65 minutes and were carried out in the time between 24 June and 17 July 2008. The interviews were carried out as telephone interviews.

Most important companies in the Austrian biomass, heat pump and solar collector sector have been selected. Marketing experts, product manager or sales manager of these companies have been contacted, first by e-mail and subsequently by phone. Ten people have been contacted, with six of them interviews were carried out.

The interview guidelines are included in the Annex. They show that the Austrian case of the interviews did not only focus on the tax allowance scheme but also on other promotion schemes for RES-H systems. This helps to identify the relation between these different instruments.

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https://www.bmf.gv.at/Publikationen/Downloads/BroschrenundRatgeber/SteuerbuchD_final_version_17.12.pdf,

³ Telephone interview Dr. Rainer, 27.03.08

⁴ STATISTIK AUSTRIA, Lohnsteuerstatistik 2006. Erstellt am 06.11.2007

⁵ Telephone interview Dr. Rainer, 27.03.08

II. Perception of the measure

1. General perception

The general perception of the tax measure is very clear: Interviewees don't think that the tax measure has currently any impact and neither had any impact in the past. Hence, there is neither a positive nor a negative perception, it simply does not matter. This does not differ between different technologies or between different time periods in the past.

"Income tax instruments of course do not play any role."

In contrast, there is a clearly positive general perception of the investment subsidies. This is in particular the case for the newly implemented biomass subsidy on the federal level.

"The investment subsidies from Klien [implemented on the federal level in 2008] gave a clear signal to the consumers that pellets are a good thing you can trust in."

So, all interviewees expressed their high interest in the support of these technologies since they consider it as crucial for the development of the sector. Although all the interviewees shared the general positive perception of the investment subsidies, representatives of the heat pump sector claimed some discontent about higher subsidies and positive discrimination of other renewables compared to heat pumps.

"The promotion scheme in some provinces discriminates heat pumps."

2. Perception of the impacts of the measure

With respect to the tax allowance scheme, the conclusion from the interviews was very clear: The tax allowance did not have any impact on the market, neither positive nor negative. This holds for all technologies.

With respect to the investment subsidies, most interviewees stated that the subsidies are important as a signal. They are a signal to the people that these technologies are reliable and systems which are worth to invest in. In this sense, the interviewees claimed that for a huge part of their customers subsidies play a triggering role.

However, the real impact of promotion instruments is hard to estimate since oil price, biomass prices and other factors have an essential effect, too. The boost of the market in the beginning of this decade is associated to a combination of increasing oil prices and investment subsidies.

"Of course the market increased also due to the high oil price."

In 2007 a strong market decrease of biomass boilers took place. The interviewees assigned this development to the pellet price peak in 2006. However, no interviewee claimed that this was the consequence of the public promotion scheme. However, the question was raised whether policy should have taken measures in order to stabilize pellet price development. No clear conclusion or request has been claimed in this respect by the interviewees.

The general conclusion from all interviews was that the support scheme due to the technical requirements led to an improvement of the systems. This holds in particular for biomass. Representatives of heat pumps claimed that the requirement regarding COP is too ambitious in some provinces which results in a barrier for this technology.

3. Role of the measure

With respect to the tax allowance scheme, the message of all interviews was clear: The tax allowance scheme does not play any role in the decision making process of consumers. Due to its low attractiveness and incentive on the one hand and its low transparency on the other hand it is not used in the sales pitch.

Interviewees claimed that investment subsidies are quite important in the decision making of consumers. Due to its attractiveness it is used in the sales pitch and sellers offer support in applying for the subsidies etc.

Investment subsidies are very important as a signal: Consumers see that this system is supported which they see as a positive signal. This is the main role of the investment subsidy.

Some interviewees claimed that many people want to have a sustainable heating system. However, they feel uncertain about the costs, whether it is a reliable system and whether they really should invest in a RES-H technology. In these cases, subsidies often play a triggering role.

“Especially young people are so much interested in a sustainable solution. But they doubt whether it is really the right decision. Here, the subsidy acts as the essential trigger.”

Heat pump representatives claimed that in some provinces the investment subsidies play a counterproductive role:

“The required COP values work as a barrier for market penetration of heat pumps.”

Most of the subsidies are in place since a longer period (>15 years). Therefore, it is difficult to indicate the change the system had on the consumers. However, in 2008 a federal support scheme for biomass boilers has been implemented in form of investment subsidies for pellet, wood log and wood chip boilers. This investment subsidy is in addition to provincial subsidies. The biomass related interviewees

claimed that people know this new support system and that it changed the negative tendency of the year 2007, when the biomass boiler market dramatically decreased. Again, this new investment subsidy served as an effective signal for consumers.

4. Main conclusions of this part

The perception of income tax measures for RES-Heat is clear: There is no impact of the tax allowances on the RES-H market. No interviewee claimed that in Austria the tax allowance scheme has any relevance. The perception is that there is simply no impact of the measure on the RES-Heat market and the measure does not play any role.

With respect to the investment subsidies, consumers see them as a signal: Technologies that get support are technologies you can trust in. Thus, subsidies can act as a trigger for the decision and thus have a clear impact on the market development (although there are other important impact parameters like oil price, biomass price, too). Because of that, the interviewees expressed their high interest in stable and reliable design of promotion instruments.

III. Success / failure factors

With respect to the **tax allowance**, no real success factors were identified by the interviewees (because actually there is no success of the measure). However, a *potential* success factor was mentioned: The uniformity and consistency of the scheme for whole Austria would provide substantial advantages compared to the single investment subsidies which differ between the nine provinces (and partly among communities, too).

For the interviewees, the main failure factor of the tax allowance is the low incentive of the scheme. For that reason the scheme provides no real attractive incentive.

“If you get out just about 30 Euro from a support scheme, you do not take the effort with the whole bureaucratic stuff.”

The second failure factor is the low transparency and the complexity of the system, in particular for people who are not familiar with tax declarations.

“People who are not familiar with tax declarations are very reluctant to deal with tax issues.”

With respect to **investment subsidies**, the following success factors were claimed by the interviewees:

- low administrative effort
- quick payout
- attractive economic incentive

Regarding the newly implemented biomass subsidy on the federal level, the uniformity and consistency for whole Austria is regarded as a success factor.

The interviewees identified the following failure factors or negative aspects from their point of view:

- Differences between provinces and even communities: The companies are very interested to provide their customers with profound and up to date information of subsidies. The differences among provinces require substantial additional effort to keep up to date about the different schemes. Thus, the interviewees mentioned the lack of uniformity in the subsidies as a failure factor.
- Lack of transparency and information: Some interviewees mention that to some extent and in some regions a lack of information exists.
“Customers know that the subsidy exists, but they don’t know where to apply for it.”
- Representatives of the heat pump sector claimed that at least in some provinces high technical requirements are a barrier. From the heat pump’s representative’s point of view, this is perceived as a failure factor.
- Technology specific differences which are considered to be not justified.
“People do not understand why they get 800 € for a pellet boiler but only 400 € for a wood chips boiler [from the new additional federal biomass subsidy].”

Interviewees made out a number of aspects and side-conditions as success factors in **the context surrounding the measure:**

- Oil price: The increase in energy prices certainly was one of the most essential impact parameters for the boom of RES-Heat appliances in Austria.
- Increasing environmental consciousness and public debate about climate change, oil crisis etc.
- Early uptake of the Austrian biomass boiler industry.
- High tradition of wood heating systems.
- Good information of consumers by the installers about the subsidies
- Good information by regional energy agencies (in some regions)

Failure factor surrounding the measure:

- Increasing pellets price: Due to the increase of the pellets price in the year 2006 and beginning of 2007 many consumers lost the confidence in the stability of the pellet price. As a result the sales of pellet boilers went down in 2007 by about two third. Thus, stability of pellet price is one of the most crucial aspects for the confidence of consumers.
Moreover, as a result also the sales of wood log and wood chips went down, because obviously people not only have lost the confidence in stable pellet prices but also in stable biomass prices in general.
- Lack of information and communication with the key players of the industry and installers.

Main conclusions:

The main failure factors of the tax allowance are low economic incentives, high complexity, low transparency which results in low attractiveness of the instrument. This is in contrast to the success factors of investment subsidies which are the low administrative effort, the quick pay out and the attractive economic level of support. However, interviewees also identified failure factors and negative aspects for the investment subsidies which are mainly the lack of uniformity and consistency among the Austrian provinces and lack of information.

IV. Improvements

The interviews did not lead to a clear conclusion about the possible future role of income tax instruments. Some interviewees claimed that in Austria tax instruments will and should not play a major role in the support of RES-Heat systems.

“Income tax incentives are only attractive and understandable for a small part of the customers.”

Others stated that at least for some part of the population this could be an attractive instrument additional to the investment subsidies. No interviewee opted for a tax instrument as the single support scheme.

Just one aspect was mentioned regarding the improvement of the tax instrument: increasing the attractiveness of the scheme by raising the economic incentive. When going into the details during the interviews it turned out that the interviewees were not familiar with the details of the measure and they were not interested in it, either. Thus, no detailed steps for achieving higher attractiveness of the tax allowance have been claimed by the interviewees.

Regarding the overall support of RES-Heat by investment subsidies, the following ways of improvement have been identified:

- **Uniform and consistent support scheme for whole Austria**
A uniform and consistent support scheme among the nine Austrian provinces would reduce the transaction costs of the industry for providing information about subsidies to their customers. Therefore, there is a strong interest in uniform investment subsidies. Two ways would be possible for achieving such uniformity: Either a coordination of the support schemes among the nine provinces or a shift of the competences from the provinces to the federal government. However, the expectation of the interviewees turned out to be quite low that one of these ways is politically realisable in the short term.
- **Level of support for different technologies**
The “right” level of support for different technologies has been mentioned from various interviewees. One interviewee suggested that the level of support in the newly implemented federal biomass subsidy should be the same (or even higher) for wood chips boilers than for pellet boilers. Another one argued that for all RES-H technologies the same level of support should be granted in order not to have one technology discriminated against another one. Other suggestion regarding the level of support was to link the support to the effective amount of CO₂-reduction.
- **Reliability and continuity**
As a crucial aspect for an effective support instrument reliability and continuity have been claimed. While most of the provincial subsidies are not limited to a certain time period, the federal biomass subsidy is currently

restricted to the year 2008. Thus, a continuation of this scheme has been requested by interviewees.

- **Improved level of information**

Even in cases when people know about the existence of a subsidy, they often do not know where and how they can apply for it. Therefore, more and better information about subsidies is required. The work and budget of regional energy agencies (which work well in some regions, but in others not) should be improved. This includes also the coordination between energy agencies, the industry, installers and public authorities.

Representatives of heat pumps claimed that regional energy agencies and energy consultants should give more impartial information and do not discriminate heat pumps in the consulting process.

A strong and ambitious information campaign should be carried out in order to ensure the improved level of information about RES-H subsidies.

- **Biomass price stability**

With some interviewees we discussed the reasons and impacts of the biomass price development in 2006 and 2007. This included the question whether policy should try to stabilize prices. However, no realisable policy option has been identified.

Summing up, the main ways of improvements from the interviewees points of view are:

- increasing the level of economic incentive from the tax measure
- creating uniformity and consistency of the support scheme for all nine Austrian provinces
- ensuring reliability and continuity
- providing a high level of information

Regarding the level of support of various technologies different, conflicting statements were made.

V. Conclusions and recommendations

- The Austrian tax measure has no effective impact on the RES-Heat market. The reasons are that there is no clear and effective incentive and it is too complex.
- If tax measures (and in fact all types of policy instruments) have no clear incentive and are too complex, stakeholders are not even interested in it and also have no specific idea about how and whether the instrument could become an attractive support instrument. This is currently the case in Austria with the tax allowance system.
- RES-Heat support policies (either tax instruments or subsidies) should be designed in a clear, transparent, uniform and consistent way. Among other positive aspects, this reduces the effort for industry, installers and sellers to provide information about the subsidies to the consumers. In Austria, this would require an intensive cooperation between the provinces and the federal government and probably a shift of competences between these institutions.
- For investments in production capacities, the industry needs a clear planning horizon. This planning horizon can be guaranteed by a reliable long-term commitment of policy makers to support RES-Heat systems. Only if reliability and continuity is guaranteed, a RES-Heat industry can develop (which again has an impact on the price of the systems). In Austria, the interviewees claimed that in particular the prolongation of the new biomass subsidy on the federal level would be required.
- A wide information campaign is crucial for several reasons:
 - o It increases the information level of people about the technology itself. If people are interested and trust in a certain technology, the required economic incentive is smaller, which decreases the required public budget for the promotion scheme.
 - o When people know about the subsidy, they get a signal that this is a technology they can trust in.
 - o When people get detailed information about the subsidy, they know where to apply, which reduces their transaction efforts for searching information.
 - o When the installers and sellers are informed about the system, they can use the information about the promotion scheme in their sales pitch, which is a key element in the decision making of people.The information campaign would have to include national, provincial and regional energy agencies, energy consultants, the industry, installers and all other relevant stakeholders.

- Marketing experts of the RES-Heat industry will be supportive of each type of promotion instrument that:
 - o provides an attractive incentive to the corresponding technology,
 - o is clearly understandable and thus can be easily explained to customers
 - o (does not provide a higher incentive for a competing technology)
 - o is uniform for a large region (country)
 - o is reliable and continuous
 - o grants a certain level of participation to the corresponding industry representatives.

VI. Annex

Interview guidelines

1. Introduction (5 mn)

- Introduction of topic : « your experience of the fiscal measure set up in the country that supports RES-heat appliances in individual households ...». Aim is to draw a comparison of the different fiscal measures in Europe. For this we are talking to all stakeholders of the RES sectors⁶ : manufacturers, consumers, policy makers and... installers.
- Confidentiality
- Presentation of interviewee (activity of the company, responsibilities of the participant, how long has he been working in this sector, number of sales per year, percentage of turnover in overall turnover of the company).

2. The perceived impacts of the measure at all levels of the sector concerned (10 mn)

- What impacts do you think the fiscal measure and other support schemes had these last 3 years on the sector? *first on a spontaneous level*
- According to you, what were the impacts of the measure on :
 - The market
 - The prices
 - The offer of products
- What is the level of information of the clients who are visiting you? What is their knowledge of the fiscal measure and other support instruments? What are their main channels of information? Do they come with a clear idea of what they are entitled to? Do they expect the salesman to inform them?
- What role does the measure play according to you in the investment projects of the consumers that contact you?
- In other countries we have seen that the fiscal measure can play different roles for the consumers : a triggering role / a reassurance on the project financial feasibility / the possibility to change the nature of the investment thanks to some more money available / just an unexpected good surprise.
Regarding to your consumers, I would like you to break down in percentage your consumers into these 4 roles. Then can we describe the kind of people for each role the type of investments ?
- Do you use the fiscal measure or other support instruments as an argument in your sales pitch ? How ? (*if possible, ask for the sales speech*) What kind of calculation do you do for your prospects. Do you give them elements as to how to fulfil their tax declaration ? which ones ?
- If you do not use the fiscal measure as a means to convince your visitors, what are the more important elements that you use ?

3. Success factors / blocking or failure factors (10 mn)

⁶ In all questions the expression « the RES sector » should be replaced by « solar thermal» or « wood appliances » or « heat pumps »... as fit

- *Sum up the impacts of the fiscal measures and other support instruments as mentioned by the interviewee. According to you why did the fiscal measure have these impacts ? What were the success or failure factors for this measure? What is working well? What is not?*
- What are the other factors that play a role in parallel to the tax measure?
 - The link with other subsidies (investment subsidies of provinces and communities, new investment subsidies for biomass on national level, support of residential building construction)
 - The increase in fossil fuel prices
 - The communication / lack of communication around the measure
 - The competition with other deductible investments
 - The administrative complexity
 - The specific market development (in particular biomass price increases)
- Are there some problematic points for you in this measure?

4. Routes for improvement (5 mn)

- On the whole, what do you think of the fiscal measure and other promotion schemes?
- How do you judge its practical implementation ?
- All points of insatisfaction on a spontaneous level
- What improvements could we make on this fiscal support mechanism and other support instruments? *Detail and probe « What else ? » as many times as necessary to make all ideas appear.*

What improvements could we make on the measure itself?

What improvements could we make on side aspects? (ex other support measures in parallel)

Thanks and end