

# REFUND +

## Qualitative assessment of financial incentives

### Installers

## A Study of the Austrian Approach

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## Content

<b>I. Context and Objectives .....</b>	<b>4</b>
1. Context.....	4
1.1 Financial incentives for RES heating systems in private homes .....	4
1.2 Provincial government subsidies.....	4
1.3 Municipalities subsidies.....	5
1.4 Fiscal measures in Austria .....	5
2. Project objective .....	6
3. Methodology .....	6
3.1 Survey design .....	6
3.2 Characterisation of interviewed installers.....	8
<b>II. Contexts according to the technologies.....</b>	<b>10</b>
<b>III. Level of installer awareness of the measure .....</b>	<b>10</b>
1. Commonly known features .....	10
1.1 Tax allowance .....	10
1.2 Provincial government subsidies.....	11
1.3 Municipalities subsidies.....	11
1.4 Federal support measure climate and energy fonds .....	11
2. What do the installers ignore? .....	11
2.1 Knowledge of the history of the tax allowance .....	12
2.2 Knowledge of the history of subsidies.....	12
3. Differences on the level of knowledge according to technology.....	13
4. Conclusion.....	13
<b>IV. General perception of the measure.....</b>	<b>13</b>
1. Perception and reasons.....	13
1.1 Provincial government subsidies.....	13
1.2 Tax allowance .....	14
1.3 Subsidies of municipalities .....	15
2. Differences according to technology .....	15
2.1 Subsidies of provincial government.....	15
2.2 Tax allowance .....	16
3. Perception according to the history of the measure.....	16
4. Conclusion.....	18
<b>V. Perception of the impacts of the measure.....</b>	<b>19</b>
1. Tax allowance.....	19
2. Other subsidies .....	19
2.1 Key role.....	19
2.2 Assurance of project financing.....	19

2.3	Different device due to subsidies (larger solar panels, ...)	20
2.4	A pleasantly unexpected surprise	20
2.5	Perceived impacts on markets, prices and product offers	20
3.	Conclusion	22
<b>VI.</b>	<b>Success / failure factors</b>	<b>23</b>
1.	Success factors	23
1.1	Provincial government's subsidies	23
1.2	Municipalities' subsidies	23
2.	Failure factors	24
2.1	Tax allowance	24
2.2	Provincial government's subsidies	24
2.3	Municipalities' subsidies	25
3.	Conclusion	26
<b>VII.</b>	<b>Improvements</b>	<b>27</b>
1.	Improvements to the measures	27
1.1	Tax allowance	27
1.2	Other subsidies	27
2.	Further improvements	28
3.	Suggestions to the finance ministry	29
4.	Suggestions for energy agencies	29
5.	Suggestions for professionals (installers)	29
6.	Suggestions for customers looking for a heating system	29
7.	Conclusion	30
<b>VIII.</b>	<b>Conclusions and recommendations</b>	<b>31</b>
<b>IX.</b>	<b>Sources</b>	<b>33</b>
<b>X.</b>	<b>Tables</b>	<b>34</b>
<b>XI.</b>	<b>Annexe</b>	<b>35</b>
1.	Recruitment questionnaire	35
2.	Focus group guidelines	36

## 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 retrofittings. 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 fonds <sup>1</sup>	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 an upper limit of 1,100 to 2,900 Euro, depending on the technology (higher limit for biomass boilers). These subsidies have not been modified for at least 6 years.

<sup>1</sup> <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 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 possible 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 exempt. 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".<sup>2</sup>

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[https://www.bmf.gv.at/Publikationen/Downloads/BroschrenundRatgeber/SteuerbuchD\\_final\\_version\\_17.12.pdf](https://www.bmf.gv.at/Publikationen/Downloads/BroschrenundRatgeber/SteuerbuchD_final_version_17.12.pdf),

### *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).<sup>3</sup> This is about 50% of all tax payers (workers, employees, retirees)<sup>4</sup>. In 2004, 1.06 million applications for “special expenses” concerning creating or retrofitting living space were handled.<sup>5</sup>

## **2. Project objective**

The objective was to determine the acceptance and satisfaction with the tax allowance and other relevant kinds of subsidies of private owners of biomass boilers, heat pumps and solar panels. In most cases, these people are single family house owners.

## **3. Methodology**

The situation around the tax allowance system in Austria is different compared to the other countries investigated in the project REFUND+. This is mainly due to the fact that the tax allowance scheme does not play an important role at all in Austria. Hence, installers don't show very much interest in the scheme because they don't consider it as important for their work and the purchasing process of consumers. Therefore, their input to the analysis and improvement of the scheme is quite limited. Moreover, most of the Austrian installers involved in RES heating, have substantial experience with all types of RES heating systems (biomass, heat pumps, solar thermal). For that reason, the focus of the qualitative analysis was shifted to the qualitative interviews. The range of the installer related analysis was limited to 16 installers which were reached by focus groups or interviews. The range of the qualitative interviews has been extended to 30 persons. This approach made sure to achieve a comprehensive qualitative analysis of the role of the tax allowance scheme (and other promotion instruments) taking into account both the opinions and considerations of installers and consumers in a methodologically clear and sound manner.

### **3.1 Survey design**

16 installers were interviewed in total. Nine of them participated in focus groups, the remaining seven were interviewed by telephone or e-mail.

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<sup>3</sup> Telephone interview Dr. Rainer, 27.03.08

<sup>4</sup> STATISTIK AUSTRIA, Lohnsteuerstatistik 2006. Erstellt am 06.11.2007

<sup>5</sup> Telephone interview Dr. Rainer, 27.03.08

### ***Recruitment criteria***

When searching for interview partners, some installers did not know the measure of tax allowance. Only installers were chosen who knew the measure. In general, the recruitment was done according to the recruiting questionnaire, see Annex (1. Recruitment questionnaire). The only modification compared with the original provided by the project coordinator, was that the focus groups were not separated by technology, but in every group all technologies were contained. In Austria most installers install all three mentioned technologies, so a clear separation was not possible and even not useful.

### ***Focus groups***

There were two discussions in focus groups in towns of about 15,000 to 20,000 inhabitants (Tulln and Amstetten), in the province of Lower Austria. For the focus groups the participants were recruited by using the online telephone book and installers near Tulln or Amstetten were researched. In Tulln 12 installers promised to participate, in Amstetten 20. Finally the group in Tulln had 2 installers, the group in Amstetten 7. One focus group took place on February 26, the other on February 29, 2008.

The focus groups were 1.5 hours each and were carried out according to the focus groups guidelines in Annex (2. Focus group guidelines). The modifications compared to the original guidelines provided by the project coordinator concerned the types of financial incentives. As in Austria the subsidies (grants) from provincial governments and from municipalities are more relevant than the tax allowance, these two types of subsidies were integrated in the guideline as well.

### ***Telephone interviews***

7 further installers were interviewed via telephone (5 persons) and e-mail (2 persons). They were spread throughout Austria.

For the telephone interviews certified "heat pump installers"<sup>6</sup>, "solar installers"<sup>7</sup> or "bio energy installers"<sup>8</sup> were chosen.

The telephone interviews were about 45 min long. They were carried out according to the same guidelines as the focus groups.

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<sup>6</sup> [http://www.arsenal.ac.at/downloads/Liste%20der%20Zertifizierten\\_Installateure.pdf](http://www.arsenal.ac.at/downloads/Liste%20der%20Zertifizierten_Installateure.pdf); 20.02.2008

<sup>7</sup> <http://www.arsenal.ac.at/downloads/eet/Zertifizierte%20Solarw%E4rmeIP.pdf>; 20.02.2008

<sup>8</sup> <http://www.biomasseverband.at/biomasse/?cid=2332>; 20.02.2008

### 3.2 Characterisation of interviewed installers

Austrian installers typically are small companies of 10 to 15 employees. Only one company employs 30 persons. Most of the installers install all three types of RES heating systems: solar panels, heat pumps and biomass boilers.

Table 2: Installers participating on focus groups and telephone interviews

age: (estimated)	job title	working in the company since	size of company: was not in the interview guideline	activities of company (solar panels, biomass boilers or heat pumps)	number of installations for the concerned technology	share of RES heating systems on total turnover
<b>Focus group I, Tulln, 26.02.2008</b>						
40	CEO	1991		all three	solar panels: 15 p.a. biomass boilers: 10-12 p.a. heat pumps: 10-12 p.a.	70%
30	junior CEO	2000		all three	solar panels: 300 m <sup>2</sup> (20 - 30 devices) p.a. biomass boilers: 5-10 p.a. heat pumps: 5-10 p.a.	40% (area is supplied with gas pipe line)
<b>Focus group II, Amstetten, 29.02.2008</b>						
			small (3 employees )	all three	solar panels: 5 p.a. heat pumps: 5 p.a. biomass boilers: 5 p.a.	33%
	CEO	1988		all three	solar panels: 4-5 p.a. heat pumps: 15 p.a. biomass boilers: 2-3 p.a.	20-30%
	junior CEO	1995	small (4 employees )	all three	solar panels: 15 p.a. heat pumps: 3-4 p.a. biomass boilers: 2007: 1; 2006: 15	50%

REFUND +  
Austria

	CEO	1981	small (10 employees)	solar panels and biomass boilers	solar panels: 15-20 p.a. pellets boilers: 5-15 p.a. wood chip boiler: 1 p.a. log wood boiler: 3-6 p.a.	30%
	department head for technology and consulting	1991	small (8 employees)	all three	solar panels: 10 p.a. heat pumps: 10 p.a. biomass boilers: 5-10 p.a.	40-50%
50	CEO	1973	small (9 employees)	all three	solar panels: 25 p.a. heat pumps: 8-10 p.a. biomass boilers: 12-18 p.a.	
55	official expert, consultant of installers, constructed solar panels			solar panels, heat pumps		
<b>Telephone/e-mail interviews, installers from several parts of Austria, March - April 2008</b>						
	CEO	1995		solar panels, biomass boilers	solar panels: 5-10 p.a.	20-30%
	CEO	1976		all three, also in combinations	in total: 15 p.a.	20-25%
	CEO	1983	small (10 employees)	all three	solar panels: 300 m <sup>2</sup> heat pumps: 2-4 p.a. biomass boilers: 1-25 p.a.	high percentage, not specified in detail
	CEO	1988	middle (18 employees)	solar panels, biomass boilers	solar panels: 20 p.a. biomass boilers: 150 p.a.	95%
	joint partner	1996	small (3 employees)	all three	solar panels: 20-25 p.a. heat pumps: 1 p.a. biomass boilers: 20-25	85%

					p.a.	
	CEO	1997	small (12 employees )	all three	solar panels: 30-40 p.a. heat pumps: 10 p.a. biomass boilers: 40 p.a.	at least 66%
	CEO	1988	middle (30 employees only for heat pumps, total: 100)	solar panels, heat pumps	solar panels: 15 p.a. heat pumps: 250 p.a.	80%

## II. Contexts according to the technologies

### *Pellet boilers*

The market for pellet boilers rose substantially until December 2006, when the pellet price peaked. Then the market collapsed and is now recovering slowly. Since the new subsidy out of the federal "climate and energy funds"<sup>9</sup>, which means a grant of 800 Euro per pellet boiler and 400 Euro per wood chip or log wood boiler, the market is recovering. This subsidy has been around since February 2008 (ends by November 2008) and it has already made a noticeable impact on the market.

### *Solar panels*

In Austria the market for solar panels has been growing for the last 10 years.<sup>10</sup>

### *Heat pumps*

The market for heat pumps is developing very well too, this technology also benefits from the collapse of the pellet boiler market.<sup>11</sup>

The installers are highly familiar with the development of these markets.

## III. Level of installer awareness of the measure

### 1. Commonly known features

#### 1.1 Tax allowance

All 16 installers have at least heard about the tax allowance, as this was a precondition for the interviews. When doing the telephone interviews, four installers had to be refused, because they did not know the tax allowance.

<sup>9</sup> <http://www.klimafonds.gv.at/>; 15.03.2008

<sup>10</sup> Faninger, 2007, page 52

<sup>11</sup> Faninger, 2007, page 120

**Ten out of the 16 are familiar with the concept of tax allowance. Four know about its existence,** but not about the exact amount. One only knew that building and retrofitting measures can be taken into account at “special expenses”. One installer did not specify.

*“I used to know the concept of tax allowance very well. The amount was higher than now. Now I don’t care about it anymore, it’s not important for me anymore.”*

## **1.2 Provincial government subsidies**

**All the installers have great knowledge of subsidies from the provincial government,** as this is part of their daily business. Most of them even fill in the appliance forms for their customers.

*“You have to be familiar with the subsidies, because that’s the first thing customers ask about.”*

## **1.3 Municipalities subsidies**

The installers **all knew that there are municipalities’ subsidies.** They do not know the exact amount as this differs in each municipality, but some know the exact amount of the surrounding municipalities. One installer could not assess the municipalities’ subsidies, because his customers apply on their own, so he is not involved.

- *“The provincial government only gives subsidies if the municipalities supports as well. So most of the municipalities subsidise at least a little bit.”*
- *“In the surroundings of Villach (Carinthia), this has low importance because only two municipalities provide subsidies.”*

## **1.4 Federal support measure climate and energy funds**

This financial incentive has existed since February 20, 2008 and was not known by every installer, when interviewing. One installer said that this measure, which supports (at the moment) only biomass boilers, has caused a higher demand for biomass boilers already.

## **2. What do the installers ignore?**

**Eleven** out of the 16 installers **ignore the tax allowance completely.** They do not bring up this topic when talking to their customers. They argued that the amount of

REFUND +  
Austria

tax allowance is too low to even mention it. They do not inform their customers about it, although they know it exists. They think it is not as relevant as the provincial government's subsidy, and so it is not their business to inform people about the measure.

*"We do not talk about the tax allowance to our customers."*

**Four installers** mentioned that they **tell their customers that there is a tax allowance**, but not in detail. One of them mentioned that he does not get any thanks for this information, and so he just mentions it, but does not go into detail.

*"You don't get any thanks. I just tell them that the tax allowance exists, but no further details."*

Another one does not mention it, because he does not know much about it.

None of the installers gives advice on how to include the RES heating system into the tax return.

*"You would have to know the customer's income in detail, but that's a taboo. I don't want to deal with that at all."*

## **2.1 Knowledge of the history of the tax allowance**

Although the **installers do not think about this measure very intensive**, many of them know it quite detailed. Some of them only heard about the measure.

*"15 years ago the tax allowance was more important, because it was a higher amount and there were hardly any other subsidies (e.g. from the provincial government)."*

## **2.2 Knowledge of the history of subsidies**

Only a small number of installers could talk about the history and development of subsidies. In both focus groups the installers did not know anything about changes in the last years. Some claimed that the top limit of the (provincial government's) subsidies has remained the same for years and should be adapted to inflation. Some of the installers, which were interviewed by telephone, said the following about changes:

- *"Provincial government subsidies have exist for 10 years. The relevance of the subsidies has not changed." (Styria)*

- *“Subsidies are more important now because everything is becoming more expensive.”*
- *“Before 2003 subsidies from provincial government for solar panels and biomass boilers were lower. For heat pumps there were no subsidies up to 2005. Subsidies for solar panels have existed for 25 years, were decreased yearly but then increased in 2003. This means 15 years ago the relevance of this subsidy was lower. The tax allowance was the only real subsidy and was much higher than today.” (Carinthia)*
- *“Ten years ago subsidies had a higher relevance than now. Nowadays, fuel oil prices have increased and awareness for energy has risen and influence purchase decisions as well.”*

### **3. Differences on the level of knowledge according to technology**

There are **hardly any differences**, as 11 of the 16 interviewed installers install all three types of RES heating system, biomass boilers, heat pumps and solar panels. The other five installers install either solar panels and biomass boilers or solar panels and heat pumps.

### **4. Conclusion**

**Installers know a lot about subsidies from provincial government. They know that there are subsidies from municipalities. Most installers also know something – more or less detailed – about the tax allowance, but are not really interested in it.**

## **IV. General perception of the measure**

### **1. Perception and reasons**

#### **1.1 Provincial government subsidies**

Overall the installers have a good perception of this subsidy. Most of them explained the appliance process for these subsidies is fairly easy. Nearly all installers fill in the appliance forms for their customers.

The majority of the installers believe, that the subsidies are very important for the purchasing decision.

- *“Subsidies have great impacts.”*
- *“Without subsidies many people would think twice whether they really want to purchase, or even would not think about the new heating device.”*

A few installers even said, subsidies would be the main criteria:

- *“8 of 10 devices would not be installed without the subsidies”*

REFUND +  
Austria

- *“Subsidies are most important. Customers ask for them at first.”*

Some meant, the subsidies are not triggering, but supporting the decision for RES heating systems.

- *“It makes the decision easier”.*
- *“If the installer notifies at the subsidy at the end of the sales pitch, it helps people to decide for RES heating system – that’s how it should be. If the installer uses the subsidies as a base argument, then it’s different.”*

Three installers stated:

*“The subsidies do not influence the purchase.”*

Another installer claimed that in the last few months the climate and energy funds have had an influence on the demand for biomass boilers.

*“Subsidies from provincial government, from municipality and from climate and energy funds mean in sum an amount of up to 4,100 Euro, which is a lot.”*

**So the role of the subsidies is unclear. Some installers say it plays the crucial role, some (a slight majority), it only helps to ensure the financing, but the devices would have bought without the subsidies as well.**

## **1.2 Tax allowance**

There is no explicitly positive or negative perception. Most installers interviewed know a little bit about this measure. Four of them notify their customers on it (but not in detail), ten do not. In general, there were only a few positive reactions.

*“The positive aspect of the tax allowance is that it is additional to the other subsidies.”*

In one focus group the participants had a clearly negative perception. They claimed it would not be worth dealing with this topic, because the amount is too low. They were annoyed with this measure, so they do not tell their customers about this measure.

Others speak completely without emotions about the tax allowance. They feel it can only be applied by the customer himself. The installers cannot help them so they do not talk about it.

**All of the installers think that this measure has no influence on the purchase of RES heating systems, as its amount is too low.**

*“The tax allowance has no influence, as you don’t know exactly how much it is. Therefore you would have to know the income in detail, but that’s a taboo. I don’t want to deal with that at all.”*

### 1.3 Subsidies of municipalities

In general the installers appreciate that many municipalities support RES heating systems as well. But those subsidies vary from very high to zero, so the installers do not have a clear perception of it. For the installers it would be easier, if all municipalities subsidised in the same amount.

- *“You have to explain customers that they receive lower subsidies than in their neighbour village. People cannot understand this and feel disappointed.”*
- *“It influences the image of a municipality and also the connection between inhabitants and their municipality.”*

## 2. Differences according to technology

### 2.1 Subsidies of provincial government

#### Solar panels

The opinions differ in this sector. Most installers think, that especially for the solar panel market subsidies are quite important.

*“Especially for solar panels for hot water the subsidies are important.”*

*“Subsidies have a deep impact. The solar industry could not exist without them.”*

Two installers stated:

*“There is a strong boom for solar panels, which has started in 2005, although subsidies have been around for a longer time.”*

This would mean the subsidies did not play the essential role.

#### Heat pump

Seven installers said that subsidies have **no impact on the purchase of heat pumps, the more important argument is the energy price.**

*“Heat pumps have a strong lobby. The low running costs are the main sales argument. Subsidies are not as important as for biomass boilers.”*

There were fewer installers, who said subsidies have a great impact on the market.

### **Biomass boilers**

Three persons claimed that fewer biomass boilers would have been bought without the subsidies of the provincial government. Other installers said that **not the subsidies decide the purchase, but the oil price.**

*“Many would replace their oil boiler with a biomass boiler even if there was no subsidy.”*

A similar statement as the one concerning solar panels was:

*“The subsidies for pellet boilers have not changed for years, but when the pellets price went up, the sales of pellets boilers went down. So the purchase of a pellet boiler is not directly connected with the subsidies.”*

This means, **not only the price of fuel oil, but also of fuels in general plays an important role in the buying decision.**

One installer said that before the peak in pellet price, people bought pellet boilers because they wanted to do something good for the environment. Now they are not so sure anymore about which fuel is most likely to become more expensive in future.

Another opinion was:

*“Subsidies have deep impact on the sales of pellet boilers. This is not the case with wood chip boilers and log wood boilers. Those people would buy a boiler anyway, because they have their own fire wood.”*

## **2.2 Tax allowance**

There are no differences between technologies, installer profiles or region, as this measure has low impact in general.

## **3. Perception according to the history of the measure**

Especially in the focus groups there was some dissatisfaction about the lack of development of the subsidies:

*“The ceiling of the subsidies of the provincial government (e.g. 30% of the investment cost, limited with EUR 1,500) has been fixed for many years. It should be adapted to the inflation growth. “*

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Austria

Only very few installers had an opinion concerning the development of the tax allowance. They knew that the upper limit used to be higher.

*“15 years ago this measure was more important. But then they divided the ceiling amount into four, and now it's really low.”*

#### 4. Conclusion

The installers in general have a positive perception of subsidies from provincial government. They do not care a lot about tax allowance, because they think, this measure is too low, and so it has no influence to any purchase decision. Furthermore they cannot help their customers fill in the tax return sheet (several data have to be filled in), so it is not relevant for the installers. They can only help them to fill in the appliance for grants, and that is what most installers do.

The opinions, as to whether the subsidies play the essential role or only support the decision of purchase vary. Due to the examples mentioned by installers, monitoring the development of markets compared to the subsidies in the last years, **it seems that there is no direct connection between subsidies and sales.** Subsidies have not changed for many years, but sells did. **Important factors included rising fossil energy prices, as well as short-term increase in fuel prices such as pellets.**

## V. Perception of the impacts of the measure

### 1. Tax allowance

The tax allowance has no impact on the purchasing decision at all. This was confirmed by all installers.

### 2. Other subsidies

Many installers **could not clearly characterise**, which role the subsidies played for their customers. The opinions differ clearly.

#### 2.1 Key role

Overall, the installers stated that 30 to 80% of the customers view the subsidies (from provincial government) as a key factor for purchasing an RES heating system. Two installers believe that for solar panels the subsidies are more relevant than for biomass boilers or heat pumps, because solar panels can never be the only heating system, so another heating system has to be there as well.

*“50% of solar panels purchasers and 20% of the buyers of pellet boilers would not have been bought without subsidies.”*

Another, quite different opinion is:

*“In general, when building a new house, the financial limits are narrower, so in this group there are more people, who would not buy without subsidies.”*

#### 2.2 Assurance of project financing

The installers estimate, that for 50 to 70% of the customers, subsidies mean an assurance of the financing, but they would have bought the devices also without subsidies. Most of the heat pumps would have bought anyhow, because of the low running costs. Buyers of wood chip and log wood boilers are less influenced by subsidies, as they own their own wood and prefer to use it.

### 2.3 Different device due to subsidies (larger solar panels, ...)

Only few customers would extend their device (e.g. solar panels), people would rather save the money received from the subsidies. One stated, only very few people then decide for solar panels as heating support instead of only for hot water.

*“Usually people are simply happier, because their device gets cheaper due to the subsidy.”*

### 2.4 A pleasantly unexpected surprise

Most people are familiar with subsidies. Some installers never made the experience, to meet people, who never heard about subsidies at all.

- *“Maybe on fairs, when people do not know anything about the heating system yet.”*
- *“Only the amount of the subsidy is sometimes surprising. Some expect more, some less.”*

Two of the installers said that some **older people** see it as a pleasant surprise, because they **did not know as much about subsidies** as young consumers, but it depends a lot on the personality of the customer. In terms of retrofitting, when a new heating system has to be installed anyhow, people may not know anything about subsidies.

*“Those are older people, who have lived in their houses for 20-30 years and have to retrofit the heating anyway. For new houses the financing is planned, for those the subsidies are a nice bonus.”*

**So most installers think that it serves as an assurance of financing, rather than a pleasant surprise.** Most installers said they would not use subsidies as an argument in the sales pitch.

*“No, I don’t use subsidies as a sales argument. I sell heating systems, not subsidies. But there are installers who tell the customer more about the subsidy than about the heating system itself.”*

### 2.5 Perceived impacts on markets, prices and product offers

- **Markets:**

The majority of installers said, that there is a **high influence** due to subsidies on the market of RES systems. One stated that due to rising fossil prices the relevance of subsidies is decreasing:

*“More and more people would purchase an RES heating system even without receiving subsidies.”*

One claimed that due to subsidies **the investment takes place earlier**, before the boiler is completely broken.

One installer said that subsidies have less influence on the market of heat pumps and that subsidies distort competition.

*“Biomass boilers are subsidised much more than heat pumps.”*

Six interviewees think, that the market for solar panels is growing considerably, influenced by subsidies. Only one installer claimed, that there is no influence on the market.

- **Prices:**

Most of the installers state that the subsidies have **no influence on the prices** of the devices.

Two of them said:

*“The competition in this market is fierce. No one can afford to sell his products at a higher price.”*

Only one stated that due to a wider product range offered, the price will be lower. One claimed that without subsidies the products would be slightly cheaper, to keep a demand for them.

- **Product offers :**

The majority of the installers said that the **product offers have not been influenced** by the subsidies. One mentioned, that the product range has expanded, not only because of subsidies, but because of a boom in heating systems in general.

Only two installers claimed due to subsidies more boilers are sold, so the amount of offers is increasing, which means a wider range of product.

- **The installers themselves:**

The installers do not feel that the profile of installers has been modified by the introduction of subsidies.

### **3. Conclusion**

**Subsidies mostly play a role as an assurance of financing, for some customers subsidies even play a decisive role. The subsidies are usually seen as a way to save money, rather than increasing the investment (e.g. enlarge solar panels). Only few people (older people), who do not know much about subsidies, are surprised about it.**

**Subsidies have a positive impact on markets, but not on prices or on the product offer.**

## VI. Success / failure factors

### 1. Success factors

#### 1.1 Provincial government's subsidies

The **handling** of the provincial government's **subsidies** is generally perceived as highly **positive**.

- *"The forms are easy to fill in."*
- *"It is quite uncomplicated, only for retrofitters it's little bit more complicated."*

**Many installers fill in the application forms** for their customers. 4 installers even bring this form to the municipality's office (to apply for municipality's subsidy)

One person claimed:

*"People see that their voluntary extra investment is honoured."*

All in all the installers think that their **customers are quite satisfied with the subsidies**. One installer mentioned:

- *"We support our customers in administrative belongings (filling in the application forms for subsidies), and so there are no critics."*
- *"In that branch everybody is very well informed."*
- *"The subsidy from the provincial government stimulates investment in an RES heating system."*

#### 1.2 Municipalities' subsidies

- *"These subsidies are paid out relatively quickly."*
- *"They are advertised on the municipalities' website. Furthermore installers help filling in the application forms."*
- *"Those subsidies are uncomplicated. Usually it is completed with a form, which is filled in at the municipality."*

## 2. Failure factors

### 2.1 Tax allowance

Seven installers do not notify their customers of the tax allowances, although they know about it. They argue:

*“The tax allowance is too low and too complicated to apply for.”*

### 2.2 Provincial government’s subsidies

#### *Subsidies are not the same amount for all RES heating systems*

One installer suggested that biomass boilers are over-subsidised. Efficiency is not required, but for heat pumps this is a main criterion. All RES heating systems should be subsidised equally.

Subsidies from the provincial government have become more complicated for heat pump owners.

#### *Upper limit of subsidies*

Subsidies (**top limits**) are **not adapted to the increase in inflation**.

#### *Information for installers*

The provincial government’s **information on subsidies is not always consistent**.

- *“There is no consistent opinion/information line.”*
- *“This is inconvenient for the installer and can put off the customer.”*

#### *Duration of transfer*

Three installers indicated that **payment of the subsidies** sometimes takes place **very slowly**. Usually it takes 4 to 6 weeks. Sometimes it takes longer, although the **subsidy is often crucial** for the customer.

*“Sometimes it takes three months. Customers of course are therefore annoyed.”*

#### *Bureaucracy for receiving subsidies*

One mentioned, that the customers have to go from one authority to the next with their forms, which is annoying.

#### *Steadiness of subsidies*

One installer mentioned, that subsidies (grants from provincial government) are not fixed for a long period of time.

*“They have to be decided upon on a new basis every year. This means insecurity for customers.”*

### ***Solar panels***

- The limit for subsidising solar panels for heating should be decreased (16 m<sup>2</sup> is too high).
- Subsidies for solar panels should be connected with the size, because bigger families need a larger area of solar panels. The difference between subsidies for solar panels for hot water and for heating is too small. (The investment in solar panels for heating is much higher in relation.) *Comment of the author: one region in Austria, in Upper Austria, there is a basic subsidy plus a subsidy per square meter of solar panel.*

### ***Biomass boilers***

For larger devices the subsidy remains the same amount, although the investment is higher. The subsidy should be related to CO<sub>2</sub>-reduction.

## **2.3 Municipalities' subsidies**

There is often a demand for more information. Municipalities sometimes are not interested in paying out these subsidies.

### ***Amount of subsidy***

The installers mentioned that the **subsidies are too low**. It should be doubled, so that the price is not decisive in whether someone purchases an RES or a fossil heating system.

### ***RES heating systems in second homes***

People who purchase an RES heating system for their secondary residence, do not receive (in Carinthia) these subsidies, although they save fossil energy.

### 3. Conclusion

#### Success:

- Tax allowance: is additional to other support measures
- **Subsidies are easy to handle. They support the decision.**

#### Failure:

- **tax allowance is too low**
- tax allowance is too complicated, as applicants do not know the amount in advance
- **upper limit of subsidies not adapted to rise in inflation**
- **some heating systems are more heavily subsidised than others**
- **too long duration for payment**
- **subsidies too low**
- **information from provincial government about subsidies not consistent**
- should be modified for different devices (solar panels, biomass boilers)
- payment of subsidies sometimes very late

## VII. Improvements

### 1. Improvements to the measures

#### 1.1 Tax allowance

- The **tax allowance is too low** (maximum: EUR 2,920). It **should be raised**, to have a positive effect on purchase decisions.
- Furthermore, installers would appreciate it if there were an **explicit item on the tax form for RES heating systems**. The amount should be higher for higher investments and lower for lower investments.
- If the upper limit was higher, the **installers should be informed** about this.

#### 1.2 Other subsidies

##### *Payment of appliances, transfer of subsidies*

- Subsidies should be transferred directly to the installers, so the customer pays less for the product. He should not have to pay the whole amount in advance and get back the subsidy later.

In the focus groups the installers mentioned:

*“The installer should get the subsidy directly, because he applies for the subsidy anyhow.”*

The five installers interviewed by telephone did not agree with this suggestion.

- People should be allowed to **pay for the appliance in installments**.

##### *Steadiness*

One installer stated that subsidies should be fixed for a longer period of time.

##### *General improvements*

- *“It must be clearly communicated, what will be subsidised and what not.”*
- *“Subsidies should be adapted to the social situation. People with low incomes should get more, with high incomes less.”*
- *“All RES heating systems should be subsidised equally (not biomass boilers higher than heat pumps).”*
- *“Subsidies should be limited by time. Politicians should know what effect this would have.”*

Subsidies' amount related to investment costs (*Comment of author: at the moment the subsidies of the provincial governments are defined as a percentage of the investment costs, with an upper limit*)

**Combinations of two or more RES heating systems** should be subsidised more.

## 2. Further improvements

### *Information on subsidies for installers*

- More detailed information and consultation for installers is required.
- An overview, who can get subsidies from which authority would help customers.
- Installers prefer information not only via telephone, but in written form, e.g. via e-mail.
- Interested people should be put in contact with professionals (e.g. installers).
- more information updates – e.g. newsletters for installers
- telephone hotline for spontaneous calls (e.g. when being at the customers')
- consistent, reliable information line

### *Municipalities' subsidies*

These **subsidies should be publicised more intensively**, as many customers do not know they that they exist. One installer noted that municipalities which subsidise RES heating systems have a better image and people feel more loyalty.

*“A competition could be started, in which municipality the most solar panels were installed, or which municipality has cut most CO2 emissions.”*

### *Information on tax allowances*

There should be more information on that topic:

*“When advertising tax returns in newspapers, it should be mentioned, that RES heating systems are also relevant.”*

### *Calculation of heat demand*

A few installers claimed that customers should pay separately for the calculation of heat demand, because it is very time-intensive. Each installer has to calculate, but only one will sell the device.

Another installer said that he charges 80 Euro for this calculation, which is also mentioned in the offer. This is usual for all installers in his locality.

### 3. Suggestions to the finance ministry

Two installers suggested, **not charging VAT** for RES heating systems. Another one would appreciate a reduction of VAT from 20% to 5%.

- Tax allowance adapted to investment costs or phased in over several years.
- Easier system for subsidies: only one system – only provincial government's subsidies, but higher amount, therefore no tax allowance.  
*"Two types of subsidy is confusing. Most people will not notice one of the two."*
- Standardised subsidies in all regions  
*"Standardised amount of subsidies, but this could even bring disadvantages, because the situation could become worse then." (Upper Austria)*
- **Subsidies of 50%** for all RES heating systems (unrealistic).

### 4. Suggestions for energy agencies

The majority of the installers meant, that they should be more objective, when consulting customers (not bringing brochures from manufacturers).

One installer, who has recently finished a training as an energy consultant, believed:

*"Energy consultants are educated very well. This system works very well."*

### 5. Suggestions for professionals (installers)

Customers should be better informed. Therefore it is necessary to train installers better. Installers should care more about quality, not quantity. They should also consult with the truth (not promising higher efficiency, e.g. concerning heat pumps)

*"There are still many installers, who only install gas or oil and criticize RES heating systems."*

### 6. Suggestions for customers looking for a heating system

- Thinking in the long-term, customers should consider price developments in the next 10 years. The price of oil will increase, which makes RES even more attractive.
- Biomass from Austria ensures jobs in Austria.
- call for an independent energy consultancy
- gather information on subsidies on their own, not only count on the installer

## **7. Conclusion**

### **Improvements on the measures itself**

- **amount for tax allowance must be higher**
- **explicit item in tax return file for RES heating systems**
  
- **subsidies adapted to inflation rise**
- **subsidies more adapted to social needs of customers**
- **subsidies more related to size of heating system**
- **special subsidies for combinations of RES heating systems**

### **Improvements on the context**

- **municipalities should promote their subsidies more actively**
- **information for installers:**
  - **more consistent**
  - **in written form, e.g. newsletter**
  - **info hotline for spontaneous questions**

## VIII. Conclusions and recommendations

### *Knowledge*

Installers know a lot about provincial government subsidies, as this is the main support measure for RES heating system in Austria. Most installers also know something – more or less detailed – about the tax allowance, but are not really interested in it.

### *Perception on subsidies and tax allowance*

The installers in general have a positive perception of subsidies from provincial government. **They do not consider tax allowances, because they are too low, and so it has no influence on any purchase decision. Furthermore they cannot support their customers when filling in their tax return form, and so the installers do not take this measure into consideration.**

### *Impact of subsidies and tax allowances*

**The opinions, whether subsidies play an essential role or only support the decision to purchase are different.** Subsidies have not changed for many years, but sales have. **So the conclusion is, that subsidies are important but in many cases not most important** for the purchasing decision. Energy prices are often more important. But there are also people, for whom the subsidies play the trigger role. Especially concerning solar panels, the installers mean, subsidies play a trigger role, because solar panels can only support the central heating system.

Subsidies mostly play a role as an assurance of financing. Only few people (older people), who do not know much about subsidies are surprised about it.

### *Success factors of support measures:*

- Tax allowance: is additional to other support measures
- **Subsidies are easy to handle. They support the decision.**

### *Failure factors of support measures:*

- **tax allowance is too low**
- tax allowance is too complicated, it is one tiny point among many others (among other “special expenses”) and can easily be overlooked.
- upper limit of subsidies not adapted by inflation rise
- subsidies too low

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- information from provincial government about subsidies not consistent
- should be modified better for different devices (solar panels, biomass boilers)
- transfer of subsidies sometimes very late

*Improvements on the measures itself*

- **explicit item in tax return file for RES heating systems (no fossil heating systems)**
- **tax allowance must be raised**
  
- subsidies adapted to rise in inflation
- subsidies more related to size of heating system
- special subsidies for combinations of RES heating systems

*Improvements on the context*

- **municipalities should promote their subsidies more actively**
- **information for installers:**
  - **more consistent**
  - in written form, e.g. newsletter
  - info hotline for spontaneous questions

## IX. Sources

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Telephone interview Dr. Rainer, BMF, 27.03.08

## **X. Tables**

Table 1: Overview: instruments of financial incentives.....	4
Table 2: Installers participating on focus groups and telephone interviews.....	8

## XI. Annexe

### 1. Recruitment questionnaire

Hello,

I am doing a survey and I would like to ask you 5 very short questions :

1. Does your company install RES heating appliances such as wood boilers, solar thermal collectors or heat pumps ?  
Yes       →go to Q2  
No         →STOP
  
2. For the technology cited, approximately how many installations did your company do these last 3 years? \_\_\_\_\_ (if less then 10 for soltherm / 5 for heat pumps and wood appliances, STOP)
  
3. Do you know the fiscal measure “special expenses” that applies to these installations?  
Yes       →go to Q4  
No         →STOP
  
4. Are you the person who sells the appliances?  
Yes       →go to Q5  
No         →Try to invite the deciding person
  
5. How long have you been selling these appliances?  
\_\_\_\_\_years →Try to mix the level of experience in the same focus group.

You correspond to the profile of people we are looking for in the framework of a study on renewable energy systems. We would like to invite you to participate to a focus group on the purchase of solar panels, heat pumps and biomass boilers that will take place on the \_\_\_\_\_ at \_\_\_\_\_.

You would be offered a present to thank you for your participation. Would this be possible for you?

## 2. Focus group guidelines

### Guidelines

#### 1. Introduction (15 mn)

- Moderator presentation
- Confidentiality / recording (*all groups should be recorded but reassure them on the fact that it is only in order not to forget anything*).
- 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 sectors<sup>12</sup> : manufacturers, consumers, policy makers and... installers.
- Introduction of focus group principle : aim is to learn from the persons who are closest to the fieldwork all their analysis, opinion, functioning of the fiscal measure. All that you think is interesting for us, do not refrain yourself from expressing a thought, and do not refrain your colleagues either! Idea is to express yourself freely.
- Presentation of each participant (activity of the company, responsibilities of the participant, how long has he been working in this sector, type of installations, number of RES heat installations per year, percentage of turnover in overall turnover of the company).
- Warm up exercise : if I tell you renewable energies, tell me what it makes you think about, *probe many associations, each time someone mentions sthg, write it down on paperboard and say "OK, what else?", try to make it go quick*

#### 2. General knowledge of the measure (15 mn)

- All you know about subsidies from provincial government and municipalities today : write everything on paperboard, *this has to go quickly again*
- All you know about the tax allowance ("special expenses") today : write everything on paperboard, *this has to go quickly again*
- *Complete the general description of the measure by adding the elements that have not been cited. Explain when it was introduced for the first time. This should be done with a board prepared in advance, which summarises the contents of the measure.*
- Did you learn something? What?

#### 3. The perceived impacts of the measure at all levels (ask if there are differences between the different technologies) (40 mn)

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<sup>12</sup> In all questions the expression « the RES sector » should be replaced by « solar thermal» or « wood appliances » or « heat pumps »... as fit

- What impacts do you think the subsidies from provincial government and municipalities/ the tax allowance have had these last years on solar panels, heat pumps and biomass boilers? *first on a spontaneous level, probe on each idea that is brought about and ask the others if they agree or if they have another perception.*
- The clients who contacted you last year : did they know about the subsidies from provincial government and municipalities/ about the tax allowance? if yes : In which detail, through which channels ? / if no : why in your opinion ?
- What role do the subsidies from provincial government and municipalities/ the tax allowance play according to you in the investment projects of the consumers that contact you ? Spontaneous level, then :
- In other countries we have seen that the subsidies from provincial government and municipalities/ the tax allowance 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. Take a paper and write these percentages. Let them think a few seconds and then make a table turn and write all percentages under the these roles.  
*Tell out the general tendency.* Then can we describe the kind of people for each role the type of investments ?
- Do you use the subsidies from provincial government and municipalities/ the tax allowance as an argument in your sales pitch ? How ? What kind of calculation do you do for your prospects. Do you give them elements as to how to fulfill their tax return sheet? which ones ?
- If you do not use the subsidies from provincial government and municipalities/ the tax allowance as a means to convince your visitors, what are the more important elements that you use ?
- More generally speaking, what do you think were/ are the impacts of the subsidies from provincial government and municipalities/ the tax allowance
  - on the market
  - on the prices
  - on the product offers
  - on the overall set of installed appliances in the country

Do we have to distinguish certain periods in the history of the subsidies from provincial government and municipalities/ the tax allowance? (in the last 10, 15 or 20 years)?

*Be sure that the subjects are treated in depth and that all installers have expressed themselves on each subject. The aim of the focus group is to gather common and consensual perceptions. So each person has to position himself so as to know what is common ground.*

#### **4. Success factors / blocking or failure factors (30 mn)**

- *Sum up what were the impacts according to the participants*
- *According to you why did the subsidies from provincial government and municipalities / the tax allowance have these impacts ? What were the success or failure factors for those measures? make the participants explain in depth each idea. What is working well? What is not?*
- *Which critics did your prospective clients make on the subsidies from provincial government and municipalities/ the tax allowance?*
- *Probe on the following thematics if not brought about, saying that in other countries, some reasons for success of failure were linked to :*
  - *The increase in fossil fuel prices*
  - *The communication / lack of communication around the measure*
  - *The competition with other deductible investments*
  - *The administrative complexity*
- *Were there some problematic points for you with subsidies from provincial government and municipalities/ with the tax allowance?*

#### **5. Routes for improvement (20 mn)**

- *On the whole, what do you think of subsidies from provincial government and municipalities/ the tax allowance?*
- *How do you judge the practical implementation of the subsidies from provincial government and municipalities/ of the tax allowance? Was this complicated for you? Why? Probe.*
- *All the pluses of subsidies from provincial government and municipalities (on a spontaneous level) Detail all aspects that are mentioned.*
- *All the minuses of subsidies from provincial government and municipalities (on a spontaneous level) Detail all aspects that are mentioned.*
- *All the pluses of the tax allowance (on a spontaneous level) Detail all aspects that are mentioned.*
- *All the minuses of subsidies of the tax allowance (on a spontaneous level) Detail all aspects that are mentioned.*

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- What improvements could we make on the subsidies from provincial government and municipalities/ the tax allowance? *Detail and probe « What else ? » as many times as necessary to make all ideas appear.*

What improvements could we make on the measures itself?

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

- How would the perfect financial incentive be implemented ? What advice would you like to give to :
  - ✓ the ministry of finance?
  - ✓ the energy agency, energy consultancies ?
  - ✓ the RES professionals ? (installers among others)
  - ✓ the consumers who will start looking for a RES application ?
- Recommendations to optimise the measure implementation / recommendations to increase the measure efficiency

**Thanks and end**

**Signature of list for participation and for gift**