

Project leader



Partners

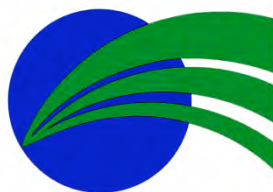


REFUND +

Qualitative assessment of direct fiscal measures

Study of the Portuguese case Focus groups with installers

**Final version
April 2008**




C E E E T A

Centro de Estudos
em Economia da Energia
dos Transportes e do Ambiente

E-mail : ceeta@ceeta.pt

Website: www.ceeta.pt

Supported by

Intelligent Energy  **Europe**

Disclaimer:

"The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Communities. The European Commission is not responsible for any use that may be made of the information contained therein."

Table of Contents

I. Context and Objectives

1. Context
2. Methodology and sample description

II. Contexts according to the technologies

III. Level of knowledge of installers on the measure

1. Knowledge of the measure
2. Knowledge of the history of the measure

IV. General perception of the measure

1. Positive perception of the measure
2. Negative perception of the measure

V. Perception of the impacts of the measure

VI. Success / failure factors

1. Success factors
 - 1.1. Public focus on RES
 - 1.2. The optimistic RES sector
2. Failure factors
 - 2.1. The lack of financial incentives
 - 2.2 The information lack
3. Improvements for success
 - 3.1. The essential improvements at financial level
 - 3.2. The essential improvements at State level
 - 3.3. The essential improvements at RES sector level
 - 3.4. The essential improvements at consumers' level

VII. Improvements of the measure

VIII. Conclusions and recommendations

1. Summary findings
2. Recommendations

List of acronyms

Annexes:

- Annex 1. Focus group guidelines (original version – in English)
- Annex 2. Focus group guidelines (adapted version – in Portuguese)
- Annex 3. Recruitment questionnaire
- Annex 4. Guidelines for interviews (adapted version – in Portuguese)

I. Context and Objectives

1. Context

The fiscal measure towards RES-Heat in the residential sector was launched¹ in 1991 with the objective to promote renewable energy use. This is the main incentive implemented towards individual households and the current characteristics of the measure (for 2007) are:

Measure	income tax reduction		
Focus	individual households (with main residence or secondary habitation), excluding persons with professional or entrepreneur incomes		
Renewable energy sources	direct and diffuse solar radiation, energy retained in forest or agricultural residues and wind energy		
Eligible appliances	Technology	Water heating	Surface heating
	<i>New equipment² for heat generation using renewable energy sources (since 1991):</i>		
	• individual solar thermal installations using flat or concentrated solar collectors	√	-
	• heat pumps	√	-
• heating systems using biomass (fireplace insert, stove, woodboiler, etc.)	√	√	
<i>New equipment for electricity generation using renewable energy sources (since 1991):</i>			
• solar photovoltaic panels and respective control and storage of energy system supplying electric energy for houses	-	-	
• wind power generation units below 5 kW of installed capacity and respective control and storage of energy system, supplying electricity for houses	-	-	
<i>New equipments for the production of electric and thermal energy (cogeneration) by microturbines with a capacity up to 100 kW using natural gas (since 2002)</i>	√	√	
Technical requirements	Any specific technical requirement is mentioned regarding minimal efficiency of the equipment (for their eligibility) neither technical competences for installers.		
Fiscal deduction	30% of the expenses with the equipment and installation (reported by an invoice or equivalent document) can be deducted from annual taxation of families' income with a fixed ceiling (€761 in 2007). Between 2001 and 2007, this fiscal deduction couldn't be cumulated with deduction regarding house loans' payments. This is no more the case since 2008.		

For 2008, some important modifications have been adopted in the framework of the new state budget. For now on, the fiscal deduction is separated from other measures which makes possible from now to cumulate deductions from a RES-heat investment

¹ Portaria n° 725/91 (29/07/1991).

² Including complementary equipment indispensable for their use.

and from house loan payments. Furthermore, the maximum fiscal deduction has increased to €777.

The work field already reflects this turning point in the development of the measure.

2. Methodology and sample description

Initially it was planned to organize 2 focus groups - biomass heating appliances and solar thermal sectors - and to make personal interviews with one or two to geothermal heat pumps installers due to the only very recent development of this market in Portugal (see WP2). The organisation of the focus group was more time consuming than expected.

For solar, it was very difficult to organise, because people are very busy with their work. The work team had to postpone several times (3 previous dates) to have some quorum. Almost all of them belong to the association APISolar³ which contribute strongly for the recruitment of installers for the focus group. The existence of an association in the solar thermal sector has worked as a lever. The focus group was performed with 6 representatives of the solar thermal sector, at 4 of March 2008, during 2 hours. It was carried out at CEEETA's office, in Lisbon.

For geothermal heat pumps and biomass heating appliances sectors it was not possible to carry out a focus group.

In the case of the geothermal heat pumps sector, a very recent sector in Portugal (about 2007), the work team had decided from the beginning to carry out some interviews face to face. These interviews were made according to focus group guidelines to know the general perception of the measure of the pioneers of this sector in the country (see guidelines for interviews in annex).

In the case of biomass heating appliances there's a different kind of situation: in spite of insistent contacts with the installers listed in the WP2, it was not possible to fix a date for the meeting with at least 6 representatives of the sector during the scheduled period (January-February) for the organisation of a focus group. The work team had to postpone several times the planned day and then gave up of the focus group. The biomass sector is represented by only small retailers and installers with diversified activities. Furthermore, this sector is not organized (there is any sector association) and seems very reluctant to act as a group.

The attendance of works and the visit or representation of markets abroad was some of the causes indicated for the difficult agenda for the focus group in Lisbon. Because of the deadlines/timetable of the project, the work team was forced to carrying out interviews face to face, such as in case of the geothermal heat pumps sector, in the sense of gathering data to the biomass heating appliances sector.

³ National Association of Solar Industry for Portugal.

Summary

Solar thermal	1 focus groups (6 persons) (FG postpone 3 times; 4th March)
Biomass heating appliances	5 interviews face-to-face of at least 1 hour each (FG postpone 2 times)
Geothermal heat pumps	2 interviews face-to-face of at least 1 hour each (pioneers of sector in Portugal)

Sample description

1) Solar thermal

Age	Job title	Working in the company since	Size of company	Activities of company	Number of solar installations
40	manager	1998	38 workers	Manufacture and selling	5000 m ² /year
56	manager	1982	30 workers	Selling and distribution	3500 m ² /year
30	commercial	2006	100 workers	Selling and installation	12 /month
45	manager	1997	n.a.	Installation	n.a.
59	manager	1982	n.a.	Selling and installation	n.a.
34	commercial	2005	n.a.	Manufacture and selling	n.a.

n.a.: non available.

In the case of solar thermal, there are different profiles of installers' presents in the group, from young to old engineers, some of them entering the market only recently and others are in the market since the 80's. Almost all of them are members of API solar.

2) Geothermal heat pumps (GHP)

Age	job title	working in the company since	size of the company	activities of the company	number of GHP installations
45	manager	2000	n.a.	ST and GHP installation	3 (2007)
47	manager	2007	n.a.	GHP installation	68 clients

n.a.: not available.

In the case of geothermal heat pumps, both professionals enter in the portuguese market just last year (2007), even though, one of them has been working abroad in this sector about 15 years.

3) Biomass heating appliances (BHA)

age	job title	working in the company since	size of company	activities of company	number of biomass installations
36	manager	1998	n.a.	BHA	n.a.
42	commercial	n.a.	n.a.	BHA	n.a.
57	manager	2005	n.a.	BHA	24 pellets stoves (2007)
49	commercial	n.a.	n.a.	BHA	n.a.
30	manager	2003	n.a.	BHA and Solar thermal	2 central heating (2007)

n.a.: not available.

In the case of biomass heating appliances there are different profiles of installers, from the small independent worker to the engineer of a large company, and some of them entering the market 3-4 years ago and others are in the market for more than 10 years.

II. Contexts according to the technologies

At the moment in Portugal there is a favourable context and the market is opening to renewal energies. This context is related mostly with the national response to political and economic international context. From one hand, the adoption of the Kyoto Protocol and the EU energy and environment policies set goals regarding RES consumption that Portugal is obliged to achieve. From another hand, the increasing prices of fossil fuels are a very important factor that conducts people to search for alternatives.

The representatives of the RES sectors that were inquired in this phase of the Refund + study recognize that the government is pushing for the development of renewable energy technologies even this is mainly caused by external imposition. Maybe because of that, the criticism emerges pointing that there was “too much talk” but “not really much investment”, meaning that this concern is present in politician speeches but not in practices.

“The renewable energies’ issue has got good implementation in Portugal. Among the Government it has been debated and the public is aware of. The EU established goals to achieve (...) Portugal bet in renewables but doesn’t invest, spread much but doesn’t go further, doesn’t help in an effective implementation. The Government says that the help is only for electricity generated from solar photovoltaic and from windpower that is possible to sell to the network, those are public interests and not interests of the public. (...) The government enforces the installation of solar thermal collectors in new buildings but doesn’t give financial help for that.”(LMA⁴, GHP).

Despite these, the result of the political speech and of the media persistence, on this matter is that:

“The market is going to open and the important thing is the cultural factor that started to come in That is in everybody mouth, which is good, it’ s the positive part of the opening.”(LMA, ST).

In fact, the sectoral representatives refer that the last year renewable and alternative energies were a current issue for the written press and broadcast media. Even if RES-heat technologies are not so much discussed (solar thermal is very often confound with solar PV), the thermal sector ended to be valorised due to intense debates on alternative energy sources. As an example the solar thermal benefits indirectly from the public divulgation that is made to the photovoltaic sector.

In Portugal the **solar sector** is living an expectation context of synergy between the thermal solar and the photovoltaic solar with a new set of measures:

“I think that nobody knows what is going to happen to this connection between solar thermal and photovoltaic. (...) I think that it’s good for the thermal. But in the new

⁴ Lisbon Metropolitan Area.

regulation, there is no mention to quality, which is pretty bad. I already have got clients that are saying – I want the photovoltaic and still have to have some meters of thermal? Then I will set a box upwards... - They tell this directly to me. (...) but the first wave of photovoltaic is for clients that are already interested in the area and already got solar thermal." (Alentejo, ST).

Nevertheless, in comparative terms, the solar thermal sector reflects a beginning disadvantage, that could explain the success that the photovoltaic is achieving: in the case of solar thermal it is not possible to sell the excess heat that is generated above one household's needs.

"If only there were Portuguese companies like EDP buying hot water that would be perfect. The problem is here, what can I do to the excess heat? When I overproduce to whom I will deliver? It's just that the difference." (LMA, ST).

However, for the solar sector, the sectoral representatives reinforce the importance to carry on politics that fortify the market, creating a context of confidence. Hesitancies and recoils of the governments in this matter have consequences in a sector that is still in phase of consolidation, and because of that, very sensible to political fluctuations.

Regarding the **geothermal heat pump sector**, the sectoral representatives refer that no one speaks of this specific kind of energy source in Portugal. Geothermal energy is generally associated with the Azores islands or Spa resorts. Even among GHP installers and sellers, there is a certain suspicion due to the competition and a certain closure reflex.

The geothermal heat pump sector is sometimes criticized by representatives of the other RES sectors (solar and biomass) who do not consider it at the same level, because this technology is strongly dependent on electricity. So they are not convinced that this technology should be beneficiate from the fiscal measure and the intermediate VAT rate.

However, the issue of lower VAT rate emerges regarding the natural gas and electricity, questioning why RES technologies are not also using a 5% VAT rate. Installers consider this situation a disloyal competition and an incoherence in the political speech.

"The competition is the natural gas and the electricity and that has 5%. We pay more than the competition. What has more immediate effect is VAT. VAT has immediate implications on prices." (Alentejo, ST)

Beyond that, in terms of social representation, they recall the mess created in the public when arose the campaigns for natural gas consumption, presented as an energy "environmental friendly", "green" and "alternative".

Finally, the **biomass heating appliances' sector** is living in a context that we could call of "multiplicity of choice", presenting several alternative technologies since the simple woodstove to automatic central heating systems using biomass pellets.

It is a sector in development, importing many models from others European countries and benefiting from the current forest policy (namely measures regarding forest fires prevention by forest cleaning).

However, the fact of the biomass in itself being taxed at 21% and electricity and natural at 5% is something incomprehensible for people working in this energy sector.

§ main conclusions

- Favourable context for RES-heat market with a strong political speech, continuous media coverage and high prices of fossil fuels.
- Lack of effective financial State investment.
- Disagreement with the 5% VAT rate applied to natural gas and electricity and 12% VAT for RES heating sector; incomprehensible 21% VAT for biomass fuel.
- Solar thermal sector living a very favourable context with new building regulations and an expectation context of synergy between the thermal solar and the photovoltaic.
- Geothermal heat pumps sector is just an emerging sector in Portugal (2007). It's still perceived as an "unknown stranger".
- Biomass heating appliances sector presents a large spectrum of choice, from simple to high technology.

III. Level of knowledge of installers on the measure

1. Knowledge of the measure

There are no differences in the level of knowledge of the measure according to the technology in which they work.

The great majority of installers know the measure and identify:

- covered renewable energy sectors;
- fiscal reduction of 30% of investment;
- fixed ceiling about 700€, updated annually
- it can't be cumulated with deduction regarding house loans payments

AND

- they know / have heard that since the present year (2008) the issue regarding non accumulation with house loan payments has been overcome.

Installers and provision of customer information on the measure

Several installers claim that they supply an invoice to their customers to be included in their fiscal declaration, even when this is often not effective due to house loan payments.

"It was inserted in an item that is rather unfortunate because it is not cumulative with interest, I mean, today everyone has a house loan to pay (...) so most people who choose to have alternative energies cannot deduct anything." (LMA, BHA)

In these cases, some installers opted for not disclosing the information due to their bad personal experiences dealing with customers who felt cheated when they found out they couldn't have tax benefits due to the issue of the house loan payments.

"I initially spoke and then I gave up because most were irritated with me because of the Government and were not buying to me the equipment. Then I stopped speaking about the measure. I was receiving for chart. It was so complicated, I, the seller, was the bad guy. I said no, we do not speak about the incentives." (LMA, ST)

"We did not want to approach the issue because it would not cover most of the cases. There was business talk about it but was directed towards attracting customers, because in the next step they are going to block." (Centro region, ST).

Other installers, on the contrary, include a note about this tax measure on their customers' quotes and also on their leaflets, calling customers attention for the fact that it is incompatible with adding up to the house loan payments.

"We inform all customers about the tax benefit. All our budgets include the full article to clarify that the tax benefit has some limitations. The full article was included so each

individual could analyze its own situation and check if it would have the benefit or not. We choose not to include that excerpt on the tax benefit alone, because that would mislead people understanding, people could wrongly think that everyone would have it. " (LMA, BHA)

"I used to warn people saying that it was not cumulative with housing interest. Nowadays, many people already know, they have heard about it however they are superficially informed only; that is the reason why I keep informing people about this issue." (LMA, BHA)

In general, they feel that they are the first, and many times the only one, source of information on the fiscal measure for RES-heat investment in the household sector.

There is also some installers that don't inform their clients because they don't have any knowledge about the measure.

2. Knowledge of the history of the measure

Regarding their knowledge of the history of the measure there is a prominent perception amongst installers that things have always remained the same, at least since late 80's - beginning 90's. There were any changes they know about until now.

When it was asked to talk about the history of the measure, after mentioning that it has always remained the same, they pointed out that the VAT was once 5% and since then it has changed to 12%. This issue is systematically referred by all the sectors, in the course of the focus group or interviews.

"During the last 10 years, I think the only measure that really had an impact was the increase in the VAT rate. This measure had a negative impact because it immediately increased the prices of the systems. This was the only measure which produced visible effects in the market, and it was negative." (Alentejo region, ST)

The thermal solar sector participants particularly stress this issue. Perhaps due to the fact that several participants in the focus group have been working on this sector for one or two decades, thus experiencing a market where the VAT was rated at 5%. There is a discourse that is both nostalgic and reactionary (mainly if one compares with the natural gas sector that we already made reference to in the previous section). But this is also expressed by the newbies in the sector, who know that there was a time when the VAT was 5%. It is like an historic benchmark.

"I still belong to the time of the 5%" (Alentejo region, ST)

Participants to the solar FG also refer the Caixa Geral de Depósitos (CGD) - a state owned bank - subsidy in the 80's as a relevant benchmark of the history of RES in the yearly beginnings.

“In the 80’s, there was an incentive to solar through CGD which has had some impact since the overall investment was covered by a loan with a low interest rate (...) The CGD initiative gave a boost to solar thermal in Portugal.” (LMA, ST)

“At the time, the measure have not had a greater impact because it was a niche market, and also because the technologies used then and the installers had no expertise which led to some 'destruction' of the solar image. It was the first steps in Portugal. We only sold through CGD. Even our ads only stated that. We used to sell the loan, not the solar energy.” (LMA, ST)

By approaching the measure from an historic stance, we can observe a tendency for talking about memories of the history of their sector in Portugal, more than the unknown history of the measure. This is more evident in the solar sector. The geothermal sector is very recent and, perhaps, biomass sector is too old and traditional.

§ main conclusions

- Installers know the measure and identify major elements.
- Installers feel the primer and many times the only one source of information about this measure.
- Installers know / have heard that since the present year (2008) the issue regarding non accumulation with house loan payments has been overcome.
- About the non accumulation with house loan payments the installers had two main behaviours: (1) hide the measure because this is a source of confusion in the commercial relation with their clients or (2) make informative notes about the measure restrictions.
- Regarding their knowledge of the history of the measure there were no changes they know about the measure until now.
- They pointed out others historic facts: that the VAT was once 5% and the financial incentive in the 80’s by Caixa Geral de Depósitos in the solar thermal case.

IV. General perception of the measure

For the 3 sectors the measure as it was until 2007 is generically not an interesting one. This perception of the measure is inducing installers to retract from giving information on the measure to their clients or simply not even speaking about it.

Unrolling of the work field itself (interviews face to face and focus group) is very revealing of this lack of interest / devaluation for the measure. The installers avoid systematically the speech on this measure and prefer to talk about other measures that would have a real positive effect on RES-heat investment for the household sector.

"There is no great thing to say about the measure. It exists, but it is not at all a special one, and few ones can use it. It is just for few ones. For the ones who have own house ..." (LMA, BHA)

1. Positive perception of the measure

The positive perception of the measure is grounded on the fact that it is a simple and nice one.

- Simple, because one just need to declare the investment cost on its fiscal declaration (IRS), without bureaucracy.

"The IRS is the simplest thing that exists. This is the great advantage of this system. (...) The person had not to ask anything to anybody; he has only to fill out the leaf of the IRS. This is the positive part of the fiscal measure." (Centro region, ST)

- Nice, because it is a good surprise during the act of purchase or because it is like a sweet reward by that kind of choice.

"It is more a candy that happens." (LMA, ST)

" Despite all this is an incentive." (LMA, BHA)

"It adds up utility to comfort; a person can have comfort and have a bonus. So why not invest?" (LMA, BHA)

"In this case there is this fiscal benefit which I think is important because at the end of the day when a person installs a system like this, he also benefits the whole country not only in terms of pollution diminution but also reduction of energy dependency from other sources. " (LMA, BHA)

2. Negative perception of the measure

The negative perception of the measure is dominant among installers.

This negative perception is grounded in 3 main reasons:

- a. until last year it can't be cumulated with deduction regarding house loans' payments;
- b. the fixed ceiling (€761 in 2007) is very low for some kind of investments;
- c. it is a completely irrelevant factor for the investment.

a. About the impossibility of accumulating with house loans' payments several installers referred that on commercial relation context it was not comfortable for them to say to a client that there is a benefit but that he could not use it.

"We avoided speaking about the measure because it was going to produce controversy and controversy in the middle of the business ...!"(Centro region, ST)

Some installers, before these circumstances, admitted even to have an attitude of "boycott" to the measure. Regarding negative factors we can identify some differences according to installer profile. Usually, the older installers of solar thermal sometimes omitted the measure to a client. They were doing it to avoid a situation of confusion with the client as "it gives and takes away" – the client knows that there is a benefit, but at the same time that it can't use it. This type of situation led to a lack of interest for the measure, which in the context of sale was disturbing more than it was seducing the client.

It adds the negative fact of only the clients that have their own house are able to get the fiscal deduction; this fact makes the measure "elitist".

"Until last year we had to explain to customers that this happened because most people were convinced they would get the tax benefit and then were faced with the reality that they would not have it. Given so, we use to explain that the benefit exists, 'but'. And in fact most customers have a house loan; they did not own their houses." (LMA, BHA)

b. Regarding the fixed ceiling several installers consider it completely away from the reality of the necessary investments for a system of central heating at home (namely systems of central heating with geothermal energy or biomass boilers). In these cases the investment is such that the ceiling makes the incentive irrelevant:

"It is ridiculous."(LMA, BHA)

"As for biomass central heating, or in the case of either larger solar panels or more advanced which are much more expensive, then the 30% end up hitting that limit (...) although a huge investment has been made. Thus ends up being a situation that penalizes those who invest more, to a certain limit it is fair but beyond that..." (LMA, BHA)

However there are differences according to the technology involved. For a fireplace insert, a woodstove or even a simple solar thermal installation for domestic hot water the fixed ceiling (€761 in 2007) is reasonable, but not a strong factor.

“Regarding the solar thermal, the benefit seems to be very reasonable.”(LMA, ST)

c. At last, the measure is not really a selling argument and definitely it is not a decisive factor for the client. It is a benefit that has no impact on the investment decision. Furthermore they have to wait for the next year to receive something. Usually the persons do not even know the real effect of the measure on their income tax because they only know how much they have to pay.

“It is not a selling argument (...) is a support (...) it is ultimately important but is not the major reason for purchasing it. Ok, the State gives this benefit (...) however it is not significant (...) nobody is taking a decision only on this basis” (LMA, BHA)

§ main conclusions

- Positive perception of the measure: simple, a nice incentive but just for small appliances, a “nice candy”, a bonus.
- Negative perception of the measure: it can't be cumulated with deduction regarding house loans' payments; the fixed ceiling is very low for some kind of investments; it is not a decisive factor for the client's investment.
- It is not really a selling argument; it is more an information given to the client.

V. Perception of the impacts of the measure

The main impacts of the measure in installers' opinion were more negative than positive as we mentioned in the previous section.

From the point of view of the installers, the measure itself doesn't attract new public towards renewable energy.

It was not possible to observe an increase level of quality of the products nor has the profile of installers been modified by the introduction of the fiscal measure.

When we try to analyse the impacts of the measure on the consumers we realise that there is a lack of data in our country regarding the number of heating installations each year.

There are also an important percentage of clients for which the measure was not useful because of the house loans' payments. The installers expect that the changes made in 2008 will have some positive impact in the number of people that can benefit from it.

But the installers reinforced that it is important to realise that no one make the purchase and take the decision of the amount of investment because of the existing fiscal measure, unknown for most of the people.

In Portugal, there are a lot of people for whom the measure was simply a good surprise when the seller informed them (see section IV).

In this context of a great lack of information, installers reinforced the need of a good campaign about (1) this and another incentive measures and (2) advantages of this kind of energy, mainly the positive impact on domestic economy in energy costs, the short amortization time of the investment and environmental positive impacts.

In fact, there is a context of a lack of information. Accordingly some people just know that this measure exists and that they can benefit from it when the work team was doing the recruitment for the interviews face to face (see report on Qualitative assessment of direct fiscal measures. Interviews Report – Study of the Portuguese case).

In general, there is no perceived impacts nor in the market, nor in the rise of equipment prices, nor in product offers, nor in the installers themselves, nor in the consumers.

What is attracting people to sector is the mediatisation of the issue "energy" on television and press, global warming concerns and the higher and higher prices of fossil fuels (see section II).

§ main conclusions

- The impacts of the measure in installers' opinion were more negative - in the sense that there are no perceived impacts - than positive.
- No one take the decision of the amount of investment because of the existing fiscal measure.
- The measure is unknown for most of the people which reflects a great lack of information.
- The installers expect that the changes made in 2008 will have some positive impact in the number of people that can benefit from the measure.

VI. Success / failure factors

According to the installers there are no real success factors of the measure because it is not a determinant factor of decision for the client. The decision factor is to have money in cash to invest.

Even when the clients already know the fiscal benefit of their investment in RES no one decide because of the measure. It's just a "nice think", not a real incentive for this kind of energy choice.

If we analyse the context of the measure according to the installers we can identify some success factors, some failure factors and a range of improvements.

1. Success factors

1.1. Public focus on RES

Like it is described in section II, in Portugal there is a mediatisation of alternative energies and new policies on this issue.

The media coverage about clean energies, climate changes and environmental issues is bringing more awareness and public concern about these matters.

Public is also more than ever sensitive to energy matters, especially due to savings that RES can promote.

In this matter, the rise of fossil fuel prices is having a great influence on the market – there are more people asking and searching for cheap, alternative and clean energy sources.

"The oil price itself has lead people to search for alternative energies and environmental awareness has also made people to distancing themselves from the so-called fossil fuels since these are very harmful and damaging for our environment. And if we can help to avoid those situations, we should do so." (LMA, BHA)

"As regards to biomass, most clients/consumers/customers that come in do not directly ask for biomass, they contact us to seek solutions of renewable energy for central heating (...) these are typically consumers who are aware of the environmental issue. (...) clients to whom we suggest the biomass are typically people who say – ok, I am about to start building my house, this is the house plan, and I am looking for the best solution. These are typically clients who want a solution from scratch. (LMA, BHA)

1.2. The optimistic RES sector

A range of new measures is creating a very positive context with optimistic perspectives for the professionals of the RES sectors, especially in the solar case.

There are more demonstrations exhibitions with good effects on the market and more people are asking for RES when they are going to build a new house.

It is easy to demonstrate that this kind of investment is recovered in a few years (3-5 years); and that this recover happens during the equipment guarantee.

It is also easy for the installers to present to the client comparative figures about costs and energy consumed that show the difference between heating a house with natural gas, LPG, diesel-oil, electricity or with solar, geothermal or/and biomass energies.

"We present a cost analysis. For each system - propane gas, diesel, natural gas, and geothermal - we present a map costs and we inform individuals how much each solution depreciates over time and monthly costs." (LMA, GHP)

"To explain to people the performance of each equipment, whether it is solar energy, whether it is a biomass, and make explicit how people can make savings in the levels of consumption and the outcomes in terms of profitability. And tell people about the fiscal incentive that now exists." (LMA, BHA)

And, plus, the renewable energy offers very stable prices and is "made in Portugal":

"Biomass of the forest clearings, sun price and earth temperature are at good price!" (LMA, GHP)

"To compared with gas and diesel, there is the issue of price stability, which is expected not to increase as much as the other fuels that we do not produce in Portugal" (LMA, BHA)

" For biomass I would say that there are advantages, being produced in Portugal is also an important comparative advantage." (LMA, BHA)

But all this favourable context and the demonstration of the benefits from RES systems stumble over one blocking-factor: there is no money to invest. The regular consumer can't afford it.

"I have here the proofs to be a good investment, but I have no money." (LMA, GHP)

2. Failure factors

2.1. The lack of financial incentives

The success factors of the context described above are neutralized because of the lack of money to invest.

“Someone is going to spend, then to save! What the people wanted was more investment capacity. Money is lacking for the initial investment that is still a reasonable investment.” (LMA, ST)

The effective impact of the measure that is in evaluation in this study is very low because of that: there is no money to invest “now”, to recover (something, nobody knows how much) “next year” with a deduction on income tax.

“When we are talking about benefiting in terms of individual income tax, we are always talking about a person who makes an initial investment that represents a financial effort then later can possibly recover this amount, or part thereof in the following year.” (LMA, BHA)

“Because they buy in January or February, during first semester, they will receive in a year only. They don't know what is going to happen to them in a year time” (LMA, GHP)

And there is no money to invest “now”, to recover (all) in the next 3-5 years with the savings in every energy bills.

According to installers there is a lack of investment capacity of the consumers that compromises the effective ground of RES heating in Portugal.

The RES heating are luxury articles and elitists, only accessible to those who have high income and consequently the fiscal measure also only benefit those who have economic capacity to invest.

“These systems are for the one who can and not for the one who wants.” (LMA, GHP)

For customers, central heating systems either with wood boiler or geothermal systems are the very best solutions in terms of consumption over time, however due to their high cost, customers end up declining these solutions.

“It is obvious that the critical point is at the final customer. It is neither the profitability of the system nor the quality, the most important thing is how to finance the initial investment. (...) The only measure that could deeply change the market would be a new and appropriate financing scheme.” (Alentejo region, ST)

“For renewable energies, there is always a barrier which is the financial barrier, cash.” (LMA, ST)

This creates a negative and squeeze context: the ones who have more economic difficulties, don't have money to invest in a RES-heat system; so they buy instead electric appliances – equipment with affordable prices and not requiring installation - but with high energy costs along the time.

On the opposite side, the ones who have money to invest quickly recover the investment by starting to have reduced costs of energy consumption.

"They are not so worried whether they can have a fiscal deduction or a tax benefit, they are focused on spending less daily." (LMA, GHP)

2.2 The lack of information

In this entire scenario emerge an obvious lack of information of people, not only about the measure but about energy and environmental issues.

All the different RES-heat sectors agree in this point and ask for a communication campaign. They reinforced the lack of information and ask for responsibility of the State in this matter.

The critics to the State in this point go further and they talk about the presence of "perverse" publicity with the renewable energy policy discourse:

"It seems to us that it is not correct to speak of natural gas as a clean energy, to claim it is good for nature because it is natural. (...) These are marketing operations that contribute to mislead the people, and indeed that is what they do (...) the image that is broadcasted of families walking barefoot and short sleeves at home during the winter, with comfortable indoors temperatures, is a great encouragement to consumption. (...) Then there is also the question of how much people consume; and this idea that the more people consume the cheaper is the cubic meter of gas, so from the outset is an encouragement to high levels of consumption, which I think does not make sense (...) because the more people saves the better outcomes for environment." (LMA, BHA)

From the contact with the consumers, the installers identified 3 main sources of information about RES-heat: relationships, internet and installers.

"From what I understand, people search for information on the Internet. Or install geothermal and see what happens. Or install central heating (...) after that call a friend asking what he thinks is best, asks for further information." (LMA, GHP)

"People are rather informed because many customers who contact us already know people who have installed (...) people access information through acquaintances, friends and family who have already installed such systems, therefore they have information on how was the process and to what extent they can benefit from this or not; and also there are other cases in which people who come to us have already contacted other companies and therefore have had some previous information." (LMA, ST)

Nevertheless, in a context of lack of information and absence of the State in the role of information source, the invasion of a new market with multiple choices make the consumer feels lost. There are so many new alternative products for a RES-heat system that it's difficult for people to choose and decided with confidence and consciousness.

"What we notice is that there are many products, there are many ways to have central heating and people seem to be confused and have difficulty to choose the best for their own case (...). There are several solutions, not only the case of natural gas, but also solutions that are perceive as being trendy or fashionable like renewable energies, which convey the message that this energy is clean, environmentally friendly, when in reality it ends up ultimately not being. (...) To make a decision is not always an easy task since it involves a considerable investment, so one has to consider all pros and cons when comes to decide."(LMA, BHA)

"We also have many customers/clients who are completely confused in relation to solar thermal and solar photovoltaic due to the information made available by the mass media. I don't know why but the solar photovoltaic has more impact and ultimately is the most widespread (...) people are more impressed with this option and think once they install solar panels in their houses they will not spend a penny more for energy and electricity. And then they also confuse the issue of energy and electricity." (LMA, ST)

"They are very surprised when we say that the investment is deductible in IRS because they do not perceive biomass as a renewable energy; people associate wind power or photovoltaic with renewable energies but not biomass."(LMA, BHA)

It's true that the installers feel the lack of a main source of information, not just about the measure but also on RES-heat systems. The FG participants emphasized the lack of information, formation and certification of some installers. This situation has provoked negative consequences on the quality of service and information given to the "lost consumers" that don't know where to go to get credible information and have to trust on the installer. That appeals for their social responsibility.

3. Improvements for success

The installers gave a large range of potential improvements for the success of RES-heat technologies at different levels: financial, governmental, RES sector and consumers.

3.1. Essential improvements at financial level

- To reduce the VAT rate for RES heating appliances.
The installers consider the VAT reduction very interesting and desirable because it has got an immediate impact on the price of the product in the purchase act.
- To reduce the VAT rate of biomass (21% versus 5% for natural gas)

“In any case I think that what is the most penalizing (...) is the question of VAT, not only the 12% VAT on equipment but above all the 21% VAT for biomass, and it ultimately does not make sense especially when we have natural gas with 5% VAT rate.”(LMA, BHA)

- To reduce the VAT rate for costs associated with the conversion and installation of RES heating in old houses.
- To make available a loan with low interest rate, to support the initial huge investment. It's important to democratize the sector, surpassing its elitist character.

“A loan with low rate. It could be created a credit line for the geothermal appliances with a low rate or participated by the State that anyone can have access to. Of course, it has to be controlled because there may be many who use the loan for other purposes (...).” (LMA, GHP)

- To create a payment system without interests by 12 monthly instalments.
- To raise the price of fossil fuels.
- To transfer to the local authorities the implementation of tax benefits.
- To create a benefit system that makes a positive difference for “made Portugal” equipment.
- To benefit certified installers.
- To convert the benefit of the measure to money in the purchase act.

“Inevitably, a person has to make this financial effort initially. I do not know to what extent it would be possible to relieve people from this initial effort, being the State to pay for this initial financial amount to people.” (LMA, BHA)

- To make specific improvements to the measure (in the next section)

In other words: many suggestions to relieve the initial financial effort.

3.2. The essential improvements at State level

- To create instruments for the dissemination of credible information and institutional communication to the people.

“Build up a network to make information available, so when consumers search for information and a list of accredited installers, they can easily consult it through an

association or the general directorate for energy or other state department (...). There is no credible source besides the Internet which is an excellent source; to my knowledge there is no other source to get information. (...) In my opinion, there should be a state body to disclose publicly such information, with impartiality and credibility.” (LMA, GHP)

- More information to consumers: informed consumers better recognize the quality of equipment or installation.
- More information to the professionals working in these areas - can be also a good source of information for the clients.
- To create a standard system of simulation of energy savings for the consumer so he could take its decision for the more suitable system according to its needs.
- To create a body responsible for monitoring the implementation of the regulation, certification of the projects and the quality of equipment used.
- To create an active certification authority that disseminates solutions and provides credible information.
- To benefit “made in Portugal” equipments.
- The local energy agencies should implement more concrete projects .
- The responsibility of the State to set an example, passing the politically correct speech for best practices regarding energy (e.g. RES in public buildings).

“So it can be regarded as an example of best practice. For example, there are many schools that could have geothermal, many hospitals that could have geothermal. It would be cheaper (...) Example must come from the top down (...) for individuals to believe in what the state supports and campaigns for (...) it would contribute to raise awareness among individuals and public concern.” (LMA, GHP)

3.3. The essential improvements at RES sector level

- Continuous training of professionals and to invest in the training of architects, builders and designers.

“Training, training, training” (Centro region, ST)

- To invest in the certification and quality.

“Quality of work is essential (...) we don't just want to sell more square metres, we want to sell more good and functional square metres. We don't want to sell more square metres in a way that in 2 or 3 years time it will destroy the market like it happened in the 80's; bad systems, things badly done.” (LMA, ST)

- To resist to the “temptation” of using cheap material that makes poor installation.
- To be “demonstratives” in a context of lack of knowledge about RES-heat systems; assuming the source of information role.

“Have a place for demonstration, nowadays people value the experience, it is important to have the equipments on display so, for instance, during winter when people come in to get information for purchase they can feel how much comfortable is here, they like to experience that, they like to see how it works when you make a demonstration, they ask how much it consumes, how can they reduce their energy consumption, how to use the equipments in a energy safer mode. Here they get a different perception of what they usually hear about.” (LMA, BHA)

- To take the social responsibility to inform the client.

“Inform themselves first, of course, and then inform the public adequately. Because at least at this stage when we are dealing with small installations, in my opinion installers have a major role in terms of information. Presently, the most credible and tangible information that people can access is first given by companies/installers. Companies offer them solutions, people obviously have the notion that it is a commercial situation but somehow it must be a neutral situation in the terms of the information provided. (...) I think first and foremost it is a matter of responsibility of information.” (LMA, ST)

3.4. The essential improvements at consumers’ level

- To have the medium / long term the vision of investment/savings.

“According to own needs and requirements, search for and choose the system which is the best solution both in terms of investment and in payback; make comparators counts of how long is needed to recover the investment.” (LMA, GHP)

- To study the alternatives, compare and choose the most appropriate solution to their way of life.
- To resist the “temptation” to saving money in a non professional installation.

“Above all people need to know what they want and evaluate if what they want is what they really need, in other words, what solution is best to make the best use of the system.”(LMA, BHA)

- To get more information as a quality guarantee.

§ main conclusions

- The main success factors are a positive public focus on RES - environmental awareness, energy in the media and in the national and international politics - and an optimistic RES sector with new policies and measures.
- The main failure factors are the too low financial incentives and the lack of information for consumers but also for installers.
- Top improvements at financial level: to reduce the VAT rate and to relieve the initial financial effort.
- Top improvements at State level: to take the social responsibility of delivering credible and updated information and to set an example for best energy practices in public buildings.
- Top improvements at RES sector level: to invest in training, in quality of installations and equipment, and to take the social responsibility to inform the client.
- Top improvements at consumer's level: to get more information as a quality guarantee and to have a medium/long term vision of investment.

VII. Improvements of the measure

In the previous section we focus all the factors, scenarios and contexts that can cause success or failure of the fiscal measure, according to the RES-heat professionals. In this section we are going to focus only in the improvements of the measure itself suggested by the installers that were involved in this study.

One of the main required improvements has already been performed:

- Since 2008, the RES fiscal deduction can be cumulated with deduction regarding house loans' payments.

"This year, a major step forward has been taken in order to reduce the interference with the rules for house loans." (LMA, BHA)

Others improvements suggested to create a more attractive measure are:

- to maintain the fiscal deduction at 30% of the expenses, but without a fixed ceiling;

"I'm not sure to what extent it would make much sense to remove this limit, being a percentage without a fixed limit for example, and the customer/client/consumer who actually installed a system more expensive would have a higher benefit." (LMA, BHA)

OR

- to raise de fixed ceiling (a deduction of €761 in 2007 is very low for almost all kind of investments);

OR

- to define different levels for different amounts of investment;

OR

- to raise fiscal deduction to 40% - 50% and to raise the fixed ceiling;

At last, but not least, an important improvement required by the installers is:

- Full information about the measure for themselves and for the public in general; a simple simulation system of the amount returned to the consumer in the following year would be welcome.

All these concrete suggestions of improvements of the measure itself come from the 3 RES-heat sectors. There are no differences by technology.

§ main conclusions

- The main improvement required has been done: RES fiscal deduction can be cumulated with deduction regarding house loans' payments.
- Several alternatives are suggested: to maintain the % of fiscal deduction but without a fixed ceiling; to raise fiscal deduction (% and the fixed ceiling); to define different levels for different amounts of investment.
- The sector asks for full information about the measure.

VIII. Conclusions and recommendations

1. Summary of findings:

- In Portugal this measure has no impact on RES-heat investment in the household sector.
- The measure isn't a sale argument for the installer - it is information for the client and an "easy candy".
- Negative sides of the measure: (1) until last year the RES fiscal measure couldn't be cumulated with deduction regarding house loans' payments; (2) there is no money to invest "now", to recover "next year" (a small part) with a deduction on income tax; (3) the fixed ceiling is very low for some investments.
- The national experience in RES-heat systems until now shows that there is a need for accompanying measures to reinforce this sector.
- With new measures in force, especially in turn of the solar sector, installers live a moment of positive expectations. But, even so, they don't dispense other measures.
- The kind of measures they require: measures that makes the difference in investment decision / purchase like a 5% VAT rate or a loan with low rate.
- More credible sources of information about the sector and more professional quality.

2. Recommendations:

All the improvements for success at financial level, State level, RES sector level and consumer's level - can be seen as recommendations. Here we present some major axes of action:

- To give credible information to consumers to face the "unknown" and to became a quality guarantee.
- Invest in training, information and credible certification in the RES-heat sectors.
- To create financial incentives for the initial investment.
- Best energy practices for public buildings.
- To create a data base for RES-heat installations to promote this sector in Portugal.

List of acronyms

BHA	Biomass heating appliance
FG	Focus group
GHP	Geothermal heat pump
IRS	Imposto sobre o Rendimento das Pessoas Singulares (Personal Income Tax)
LMA	Lisbon Metropolitan Area
RES	Renewable energy source
ST	Solar thermal
VAT	Value Added Tax

Annexes

Annex 1: Focus group guidelines (original version – in English)

Please replace in all guidelines “the fiscal measure” by the name of the measure in your country. The guidelines deal with one RES sector only: adaptation might be necessary for each of the 3 sectors.

1.1. 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 sectors⁵ : 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 something, write it down on paperboard and say “OK, what else?”, try to make it go quick*

1.2. General knowledge of the measure (15 mn)

- All you know about the measure 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?

⁵ In all questions the expression «the RES sector» should be replaced by «solar thermal» or «wood appliances» or «heat pumps»... as fit.

1.3. The perceived impacts of the measure at all levels of the sector concerned (40 mn)

- What impacts do you think the fiscal measure has had these last years on the sector? *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 fiscal measure? if yes: In which detail, through which channels? / if no: why in your opinion ?
- What role does the measure 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 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. Take a paper and write these percentages. Let them think a few seconds and then make a table turn and write all percentages under 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 fiscal measure 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 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?
- More generally speaking, what do you think were/ are the impacts of the financial measure
 - 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 measure?

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.

1.4. Success factors / blocking or failure factors (30 mn)

- *Sum up what were the impacts according to the participants*
- According to you why did the fiscal measure have these impacts? What were the success or failure factors for this measure? *make the participants explain in depth each idea.* What is working well? What is not?
- Which critics did your prospective clients make on the fiscal measure?
- *Probe on the following thematic 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
- ... to be completed according to national context
- Were there some problematic points for you in this measure?

1.5. Routes for improvement (20 mn)

- On the whole, what do you think of the fiscal measure?
- How do you judge its practical implementation? Was this complicated for you? Why? *Probe.*
- All its pluses (*on a spontaneous level*) *Detail all aspects that are mentioned.*
- All its minuses (*on a spontaneous level*) *Detail all aspects that are mentioned.*
- What improvements could we make on this fiscal support mechanism? *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)
- How would the perfect measure be implemented? What advice would you like to give to:
 - ✓ the ministry of finance?
 - ✓ the energy agency?
 - ✓ the RES professionals? (installers among others)
 - ✓ the consumers who will start looking for a RES application?
- Recommendations to optimise the measure implementation / recommendations pour to increase the measure efficiency

Thanks and end

Signature of list for participation and for gift

Annex 2. Focus group guidelines (adapted version – in Portuguese)

Guião Focus Group

1. Introdução

Este estudo europeu tem como objectivo avaliar a medida fiscal que diz respeito à possibilidade de colocar o investimento em equipamento de energias renováveis no ISR, no sentido de comparar com outros países a sua aplicação prática

- Para si o que significa energia renovável?

2. Conhecimento geral da medida

3. Impactos da medida percebidos a todos os níveis do sector

- Que impactos é que considera que esta medida teve no sector nestes últimos anos?
- Os clientes dos últimos 2 anos sabiam sobre esta medida?
Se sim, em que medida e através de que meio?
Se não, porque é que acha que isso acontece?
- Nos outros países europeus verifica-se que a medida fiscal pode desempenhar diferentes papéis para os consumidores, por exemplo, ser uma inesperada boa surpresa, ser uma forma de poder investir mais, factor de decisão, a segurança financeira de levar a cabo o investimento
- Que percentagem de cada tipo?
Em que tipo se localiza a maior parte?
Que tipo de pessoas é de cada tipo?
- Usa esta medida fiscal como argumento de venda?
- Diz-lhes como preencher a declaração de IRS, dando-lhes os elementos necessários para tal? Quais?
- Quais são os outros argumentos de venda que utiliza?
- Quais acha que são os impactos desta medida ao nível do:
Mercado
Preços
Oferta de produtos
Na quantidade de instalações no país
- Acha que há diferentes períodos da história desta medida? Quais?

4. Factores de sucesso / factores de bloqueio ou falhanço

- Disse que a medida tem/teve estes impactos. Porquê?
- Qual o factor de sucesso da medida / o que funciona?
- Qual o factor de falhanço da medida / o que não funciona?
- O que é que os clientes criticam ao nível desta medida?
- Considera que contribuem para o sucesso / insucesso da medida?
...O aumento dos preços de petróleo
...Comunicação?
...Competição com outras deduções IRS?
...Complexidade administrativa?

5. Caminhos para melhorar

- De uma forma geral, o que pensa desta medida?
- O que pensa da sua implementação na prática?
- O que é para si mais complicado?
- Porquê?
- O que podia ser melhorado nesta medida e no seu mecanismo de suporte fiscal?
- Que outros melhoramentos poderiam ser feitos em torno desta questão?
- Qual a medida perfeita?
- Que conselho gostaria de dar ...
Ao ministro das finanças?
À Agência de energia?
Aos profissionais da área das energias renováveis - vendedores, instaladores, ...
Aos consumidores que comecem agora a procurar por uma aplicação de energia renovável
- Que recomendações para otimizar a implementação e eficácia da medida?

Agradecer e pedir para assinarem a folha de participação
Fevereiro/2008

Annex 3. Recruitment questionnaire

- 8 people present means recruiting 11-12 people for each group
- Installers of wood heating appliances or solar thermal appliances or heat pumps appliances
- At least 10 installations of such appliances in the last 3 years for solar thermal and 5 installations of such appliances for the other two technologies.
- participants have to know the measure we are talking about : if the company is relatively big, make sure that we are inviting the person who sells the appliances, not the one who installs them.
- For countries where the measure was implemented long ago, make sure to have also mature participants who will know the different phases of the measure.

Adaptation of recruitment questionnaire:

For Q5 replace fiscal measure by the name of the fiscal measure in your country and list other financial help that could have been received by the interviewees

Annex 4. Guidelines for interviews (for sectors biomass and GHP)

Guião entrevista – sectores/instaladores

1. Introdução (15 mn)

- Apresentação do entrevistador
- Confidencialidade garantida (gravação apenas como auxiliar de memória)
- Apresentação do tema do projecto: qual a sua experiência com a medida fiscal que beneficia quem adquire para a sua residência equipamentos de aquecimento a energia renovável - sistema solar de aquecimento de água, equipamentos de aquecimento de biomassa e bombas de calor geotérmico – do ponto de vista dos instalador
 - Para começar, diga-me o que significa para si energia renovável?

2. Conhecimento geral da medida (15 mn)

- Diga-me o que sabe sobre a medida, descreva-me a medida e os seus vários elementos

3. Impactos da medida percebidos ao nível do sector (40 mn)

- Que impactos é que considera que esta medida teve no sector nestes últimos anos?
- Os clientes dos últimos (2) anos sabiam sobre esta medida?
 - Se sim, em que medida e através de que meio?
 - Se não, porque é que acha que isso acontece?
 - Qual o impacto que a medida tem ao nível da decisão dos consumidores em virem consultá-lo?
- Nos outros países europeus verifica-se que a medida fiscal pode desempenhar diferentes papéis para os consumidores, por exemplo, ser uma inesperada boa surpresa, ser uma forma de poder investir mais, ser um factor de decisão, etc.
- Que tipo de consumidores o procuram?
- Qual o tipo dominante de consumidores?
- Usa esta medida fiscal como argumento de venda?
- Diz-lhes como preencher a declaração de IRS, dando-lhes os elementos necessários para tal? Quais?
- Quais são os outros argumentos de venda que utiliza?
- Quais acha que são os impactos desta medida ao nível do:
 - Mercado
 - Preços

Oferta de produtos
Na quantidade de instalações no país

- Acha que há diferentes períodos da história desta medida? Quais?

4. Factores de sucesso /factores de bloqueio ou falhanço (30 mn)

- Na sua opinião, como explica que a medida tem/teve estes impactos / ou essa falta de impacto?
 - Qual o factor de sucesso da medida / o que funciona?
 - Qual o factor de falhanço da medida / o que não funciona?
- O que é que os clientes criticam ao nível desta medida?
- Quais os factores que considera que mais contribuem para o sucesso / insucesso da medida?

(depois da resposta espontânea perguntar sobre cada um dos seguintes)

- ...O aumento dos preços de petróleo?
- ...A falta de comunicação?
- ...A competição com outras deduções IRS (juros de empréstimo para habitação)?
- ...Complexidade administrativa?
- ...A falta de informação da população sobre energias alternativas?
- ...A falta de formação dos instaladores

- Quais são os pontos problemáticos desta medida?

5. Caminhos para melhorar (20 mn)

- De uma forma geral, o que pensa desta medida fiscal?
- Qual a sua opinião sobre a medida, avaliando ...
 - ...factores de sucesso, lado positivo
 - ...factores de insucesso, lado negativo
- Que melhorias se poderiam fazer a este mecanismo de benefício fiscal?
- Que melhorias se poderiam fazer à própria medida em si?
- Que melhorias se poderiam fazer paralelamente? (ex outras medidas)
- Que conselho gostaria de dar a:
 - ✓ Ministro das Finanças?
 - ✓ Agência de Energia?
 - ✓ Profissionais do sector das energias renováveis? (instaladores entre outros)

REFUND +
Portugal

- ✓ Consumidores que estão a começar a procurar uma forma de energia alternativa para instalar em sua casa?
- Recomendações para otimizar a implementação da medida / para aumentar a sua eficiência

Muito obrigada
Pode assinar aqui, sff