

## SHORT TERM SCIENTIFIC MISSION (STSM) SCIENTIFIC REPORT

This report is submitted for approval by the STSM applicant to the STSM coordinator

**Action number: CA16232**

**STSM title: How are households coping with forced energy disconnections? Comparison of supporting public-, civic- and neighborly networks in Germany and Greece.**

**STSM start and end date: 31/01/2019 to 31/03/2019**

**Grantee name: Robert FRANKE M.Sc.**

### PURPOSE OF THE STSM:

This STSM was performed from the 31.01. to the 31.03.2019 at the National Technical University of Athens.

During the two months, the goal was to gain data, information and contacts on the subject of forced power cut-offs in Greece. The aim was to outline the scale and severity of the problem and to find out about the impact of such an event on affected households, as well as their coping capabilities in these situations.

A second objective was to capture the work of supporting organizations and their capabilities to help households in question. I deliberately did not only look at state or non-governmental organizations, but also at neighborly and family networks and relationships, that take their part in supporting affected households.

As part of the STSM, Interviews with affected households and supporting networks were conducted. A part of those interviews are still in work. To expand the number of cases, an additional analysis of newspaper articles on the topic was carried out.

### DESCRIPTION OF WORK CARRIED OUT DURING THE STSM

The STSM was used to work on research and collection of information regarding forced power cut-offs. For this, a mixed methods approach was used, consisting of the following parts:

- Guidelined in-depth interviews with persons that have or had a forced power cut-off in the last years,
- Expert interviews with supporting networks and organizations that are offering help and/or political work,
- Newspaper analysis,
- Re-analysis of a nation-wide survey regarding power cut-offs and energy poverty.

Altogether, three interviews with affected households and three conversations with institutions or organizations are, or will be performed. In addition, 25 cases from newspaper articles, as well as the results

of a survey containing questionnaires of 881 Greek citizens, conducted by the consumer protection organization EKPIZO, have been analyzed.

The interviews with affected households took place in the flats or houses of the conversation partners, or in public spaces. The contacts have been acquired with the help of the interviewed experts, networks and organizations, which acted as door openers by passing on contact informations of suitable affected persons. Due to the language barrier, the interviews have been translated on-site.

Methodically, in-depth interviews were performed. During the interview, a guideline helped to structure the thematic blocks. It was the goal to obtain answers and views regarding the current living situation, reasons for power cut-offs, coping capabilities, changes in daily life and wishes for the future, as well as questions about which networks or organizations have been used to overcome the situation.

With the objective of giving subject and context to the field of energy disconnections in Greece, experts interviews have been conducted. Simultaneously to the in-depth interviews, a guideline was developed to structure those talks in the topics of key informations about the network/organization, their activities and daily work, an estimate of the severity of the problem of power cut-offs in Greece, financing and suggestions for changing the current situation.

All interviews have been recorded and transcribed to make a qualitative analysis possible. The work was carried out using QDA - software. For the analysis, all interviews have been coded and categorized in an inductive approach.

As a supporting instrument, a newspaper analysis was carried out to gain the number of cases, as well as the geographical scope. Using online search engines, relevant newspaper articles from the last six years have been collected. In a next step, articles in Greek language have been translated using online text translators. Considering the problems and possible ambiguities of such an automated translations, and taking into account that often only extraordinary cases are shown in newspapers, a basic analysis, based on the thematic blocks in the interviews with affected households, was chosen. As with the interviews, all articles have been coded in an inductive way. Moreover, the social and political orientation of the respective newspapers have been noted and will be considered in the analysis.

Apart from qualitative work, research regarding questions to the scope of the issue, legal frameworks, possible countermeasures and the development of energy prices and cut-offs have been conducted during the STSM.

## **DESCRIPTION OF THE MAIN RESULTS OBTAINED**

Energy disconnections in households, usually due to unpaid bills, mean a significant loss of quality in life for those affected: they are forced to change their social practices and lifestyles. Because of that, they often get excluded from everyday social life. When electricity is used to heat a dwelling or electrically powered equipment is needed due to illness, there is also a risk that health problems will be caused by too cold rooms. (see Lidell; Morris 2010) The emergence of such power disconnections and their effects, as well as questions of how to reconnect households are therefore attributable to the research field of energy poverty.

The conducted STSM on this topic is part of my master thesis, where I aim to compare the situation of households with an electrical power cut-off in Greece and Germany. In this work, I will give a special emphasis to the organizations and networks that have a supporting role in helping the households, both in the situation of having no electrical power, as well as in overcoming this situation in a long-term solution.

In both countries, energy prices have almost doubled since 2007, while the EU28 average has risen less sharply (see Eurostat 2018a). In Greece, the price increase is explained by procedures and laws in response to the debt crisis in 2011. From there on, an overlapping of rising living costs, paired with declining incomes has been observed, which has aggravated the economic and social situation in the country. (see Atsalis et al 2016; Schuhmacher et al 2015). The situation also resulted in arrears of Greek citizens when paying utility invoices. Here, at 38.5%, the highest numbers in Europe are found in Greece (see Eurostat 2018b). In summary, it can be stated that energy and electricity prices are rising, while incomes are declining rapidly.

In contrast to those findings, Greece has not adopted a state-approved definition of energy poverty. Although the '10% rule' is widely used in Greece, it is not officially applied (see Schuhmacher et al 2015; Corovessi et al 2017). Furthermore, no official statistics on forced power cut-offs are available. Only a few figures are visible through journalistic researches. As a result, the data receives a degree of uncertainty, as they were

sometimes only mentioned to media representatives with no written sources available. Nevertheless, those numbers show a sharp increase, from estimated 100.000 cut-offs in 2011 to 232.494 in 2018 (see Dagoumas, Kitsios 2014: 7; Efsyn 2013; KTG 2018). In the above mentioned survey of the consumer protection organization EKPIZO, 5.79% of the respondents stated that they had a power cut-off due to unpaid bills in the last year, while 40% are not able to pay all their utility bills on time (see Tzega 2018).

Beginning with researches about the effects of the Euro- and economic crisis in the Greece, the debate on energy poverty and power cut-offs is as well widely circulated in the scientific community in the country. As a pioneer, Santamouris et al. presented a study of about 950 Athenian households and their energy consumption in 2007 and found that the poorest people consume the least amount of electric energy but incur the highest costs per person and square meter (see Santamouris et al 2007). In the study, 11.3% of respondents were defined as energy poor, as they have been spending more than 10% of their income for energy needs (see *ibid.*).

In contrast, numerous similar studies from the 'crisis years' show a sharp increase in energy poverty. For example, in 2016 Atsalis et al. reported evaluations of various studies and statistics, according to which up to 29.5% of households lived in energy poverty in 2013 (see Atsalis et al 2016). Particularly high values (42.1%) can be found in the mountainous north of the country, which is due to colder winters (see *ibid.*)

In an article, Dagoumas and Kitsios reviewed power disconnections in 2014, stating that in 2011 0.5% of all connections were cut-off (see Dagoumas, Kitsios 2014). „However, according to information in the press, mentioning access to PPC data, about 54% of the power cuts are reconnected at the same day, 75% within 5 days and there is only a 10% that is not connected in the medium-term” (*ibid.*). They also found that power disconnections occur more frequently in cities than in rural areas (see *ibid.*).

In summary it can be stated that many homes and apartments in Greece are insufficiently insulated and have a high energy consumption. While low prices made up for this before the crisis, rising costs, coupled with income cuts, make energy poverty a relevant and pressing issue in Greece (see Boemi, Avdimiotis, Papadopoulos 2017).

The planned paper is still in progress and will be further refined through future interviews. However, the following findings are already visible on the basis of initial evaluations of the conversation transcripts:

**Electric power cut-offs are a part of multiple problems: They are changing daily life in a radical way:**

For most affected households, an energy disconnection is just one problem among several others, but a problem challenging and hardening almost every aspect of daily life. Moreover, such disconnections don't appear out of the blue, they are a result of multiple problems and burdens a household has. The reasons for those problems are numerous and differ in various cases. In the interviews, unemployment, debts, attachment orders, rising costs of daily life, health problems and the outcome of the Greek debt crisis are mentioned.

When confronted with a electricity cut-off in daily life, the preparation of food gets complicated because the persons in question have to adapt from cooking on electrical stoves to gas- and campingcookers. Also, such appliances are used to heat water, for example for personal hygiene purposes. The interviewed local representative of the trade union federation 'PAME' also verbalized about his area of influence: “They have some, the find or bought a generator and they used petrol for the, to solve the problem, ähm, just for cooking or just for whatever they needed to.” (Interview PAME, 04.03.19).

Connectivity was mentioned as another big burden: Without electrical energy, it is hard for affected households to go online or to charge their phone, which makes it not easy for them to stay in touch with friends and family.

Apart from the changes in daily life, the second major burden detected was the shame towards the situation, especially in the relationship between the household members. For example, a household in question reports disputes between spouses because they are upset and bitter with the situation (see Interview I, 18.02.19). In addition, they are ashamed to not be able to give their children a better situation to live in: „So, one of the worst parts, except from all the things, you understand, is that the young, the girl was like seven years old [when the cut-off was implemented], like first day in the ähm ... in the, first day in the school, you know, first year in the school. She, because she was pretty young, she was asking, what's the problem, why do we don't have light? Because ... and you have to ask yourself, things that a seven-year-old can't understand, which is not very easy.” (see *ibid*)

Due to a cut-off, everyday life can change or worsen so badly that even health risks arise. In addition to problems resulting in a lack of heating options, as it is mentioned in the next paragraph, another point, particularly important for already vulnerable household-members was stated by an affected person: "Because of her health, she needs insulins like every day. So, you must have insulins to the fridge. but because there is no fridge ... um ... you understand the problem?" (ibid).

#### **Cut-offs are in connection with heating problems and cold homes:**

According to numbers of EKPIZO, around 36% of Athenian households use electric energy as their main heating option (see Tzega 2018). Similar numbers are found in the mainland of Greece and the islands, only the mountainous north is using other heating options in majority (see ibid.). With this in mind, lines between electrical cut-offs and energy poverty relating to heating problems begin to blur out. The interviews showed, that indebted households in apartment buildings are often not able to pay their share for participating in the central heating and therefore fall back on electrical heating appliances. Moreover, in the hot Greek summers, electrical air-conditioning is needed. Due to this reasons, the payments for energy rise in already indebted households. "They can not afford the winter, yes, they battle through the winter here in Greece, also during the summer, the same problem. Because of the heat. [...] They cannot have a normal live!" (Interview EKPIZO, 26.03.19) As a conclusion, the representative of PAME adds: "Energy poverty affects health, affects everything. Because, if you don't pay the [electricity] bill, you will get sick because you're cold. If you pay the bill you will get sick because you don't have money for the doctor. So, either way, it's, you are losing, ok?" (Interview PAME, 04.03.19).

#### **The Greek debt crisis plays an important role for the rise of power cut-offs:**

When studying power cut-offs in Greece, one has to take the debt crisis into account. From 2010 on, the negative impacts of the economical situation of the country burdened more and more households, battling with falling incomes and pensions, unemployment and increasing living costs. Therefore, the emergence of power cut-offs due to unpaid debts is strongly connected to the crisis. The interviews clarify the previously called statistics and can also provide more details. A representative of an network called ALANYA, that is mostly active in working class quarters between Athens and Piraeus, where they are reversing cut-offs on their own initiative, describes the impact of the crisis in his neighborhood as follows: "Until 2009, ok, if you have, one house has no, has no power, you feel odd, because it is something extra rare, you felt like this guy must have billions of problems to conduct to not be able to pay. Of course, the money, the crash was not inside Greece yet and of course the bills are lower. From 2009 on, when we get to the crisis and until today the numbers have increase not only rapidly, but [...] exponentially. It's like a boom happens!" (Interview ALANYA, 06.02.19).

For those affected, the crisis often was the beginning of a vicious circle, falling downwards in the social structure. The above mentioned family had, for example, own companies and business jobs before 2010. From this, they fell to working class and from this, they fell to unemployment and poverty. (see Interview I, 18.02.19).

In the last years, the Greek government is trying to take countermeasures by implementing a social tariff for vulnerable customers and a program for helping indebted customers by clearing off parts of the debts that they have with their electricity providers.

#### **The role of the electricity bill:**

In Greece, the electricity bill contains many charges that are collected jointly with the cost for the used electrical energy. Bills therefore do not rise primarily because of higher electricity costs, but because of the large number of charges, fees and taxes that are billed. Some of them are connected with electricity, for example the charges for building and maintaining the Greek electricity network, or the 'Special Duty of Greenhouse Gas Emission Reduction', a surcharge that is rising rapidly from 0,0003 €/kWh in 2010 to 0,02477 €/kWh in 2017 (see Tzega 2018). Furthermore, all price reductions for vulnerable customers (such as the social tariff) are collectively paid by fees of all citizens, while the state itself is not contributing to those measures (see ibid).

Other applied charges have no connection to energy at all: For example, municipality fees and taxes, real estate taxes and the costs for the implementation of elections are all collected within the energy bill (Interview EKPIZO 26.03.19). Moreover, fees for the public broadcasting network of Greece are charged. In conclusion, 60% of the electricity bill are additional charges, while 40% represent the costs for used electricity. (see ibid.)

This accumulation of fees and taxes results in various problems for the purchasers. For instance, many consumers are not able to understand their bill, the composition of the costs and the legitimacy of the charges. In EKPIZO's survey, eight out of ten recipients stated that they can not understand their bill (see EKPIZO 2018) but, because customers are afraid of a cut-off, "...they pay the bill without to see what, an explanation about the bill, because they cannot understand the explanation of the bill. It's not so clear to them." (Interview EKPIZO 26.03.19). Efforts to save energy are therefore almost impossible in this system of extra charges and fees. "There is a legitimate outrage from the consumers, whose, while having all these years the same consumption, are charged with excessive prices" (Tzega 2018). In addition, electricity bills with many additional fees tend to have big amounts, making a payment for households in a crisis even harder and therefore favour the emergence of debts and electricity cut-offs.

### **High burdens for reconnections:**

Another problem got apparent during interviews and research: For indebted households, where a cut-off is already implemented, the burdens for getting reconnected are very high. This is because energy companies ask for a prepayment of 30% of the debts, before they will negotiate an installment contract with their customers. In a concrete case, this means that "[the family is] trying to make a settlement with DEI, but, [...] because like 30% is like, you know, [...] more than two thousand Euro. In the past it was like nine months of their payments here. So, they are trying to make this thing in order to have a settlement and start paying a little. Åh ... but, until now, ähm, the problem exists." (Interview I 18.02.19)

### **Role of supporting organizations and their approaches:**

Organizations and initiatives play a crucial role in the field of electricity cut-offs. Recapitulating the talks, several approaches can be described: the consumer protection organization EKPIZO, as well as the trade union federation PAME are trying to make individual cases public, in order to push companies and governments to a solution. They are doing this by writing letters, talking to media representatives and organizing demonstrations (see Interview EKPIZO 26.03.19; Interview PAME 04.03.19).

EKPIZO is also doing legal work: By implementing class actions, they try to make the legislations and rules, for example regarding the electricity billing, more consumer-friendly. Moreover, they try to inform and educate consumers in topics related to electricity (see *ibid.*).

A more radical, but immediately working approach is implemented by the initiative ALANYA: The members are visiting households with a cut-off in their neighborhood and reconnect them on their own. This help is on no legal basis and they act in a grey area, as the disconnection is removed, but the electricity consumption is still logged on the meter. This way, they are not committing electricity theft (see Interview ALANYA 06.02.19). Affected households are in a situation of dire need, where every help is welcome. But on the long term, they are trapped in 'illegality', as such solutions are given by the legislators as justification to exclude the households from social tariffs and debt discharging programs.

On the other hand, the interviews showed that there are cooperations and contacts between workers in municipality administrations: When confronted from affected families seeking for help, they forwarded them to ALANYA: "[This] is unofficially. ALANYA is not working for the mayor's office or somebody, so // it's like, they know somebody, and they told him, [...] and it's not the only, they are not the only case, this case is ... there is furthermore then // it happens all the time, ok? (see Interview I, 18.02.19). Furthermore, the representative of PAME was referring about administration workers, which pass their own rules to find a solution (see Interview PAME 04.03.19). In conclusion, this shows that the current legal bases are insufficient and that a different handle could solve problems. On the other hand, this unofficial system is increasing the risk of arbitrariness.

Apart from organizations helping with the cut-off, households are also seeking help with charities, NGOs and church organizations in order to receive food, clothes and other basic necessities. Furthermore, family networks seem to play a big role by helping each other and being a safety net for the family members. But because of the crisis, these networks seem to disintegrate, for example when the whole family is affected with unemployment or the cut back of pensions. In the neighborhood, shame about the own situation prevented the interviewed family from seeking help: "[They did not say:] we don't have electricity, help us somehow. So, of course the neighborhood knew, but by themselves they didn't do anything like, they didn't ask for help, ok? So, the family didn't ask for help like 'help us, economically' or whatever. And on the other hand, the neighbors by their own, they didn't help somehow." (Interview I, 18.02.19).

### **SUPPORT OF THE COST STSM PROGRAM AND FUTURE COLLABORATIONS**

A large part of the research about energy disconnections investigates the causes and wants to understand what proportion of the population is affected, as well as which indicators and measured values are appropriate for answering these questions. Gains in knowledge about the way in which households deal with their situation are therefore only insufficiently covered. In this context, my planned master thesis can make a contribution in the field of electricity disconnections. Particular emphasis is given to the consideration and comparison of two European countries. It is therefore central for me to step from analyzing the causes of such energy poverty to the consideration of personal coping strategies and the analysis of the underlying supporting networks. Without the help of COST, by granting a STSM to acquire contacts and to conduct interviews, this research goal would not be reachable. Especially the connection between the situation of affected households in two European countries is a task that would not be possible outside of such a network.

As further interviews are planned to be conducted, the collaboration with NTUA Metsovian Interdisciplinary Research Center are still active. Currently, no further cooperations are planned yet.

To conclude, I want to thank Nikolas Katsoulakos and Liberis Tsabras for the help in approaching interview contacts and the on-site translation of interviews. I also want to thank the whole team in the laboratory for their help, cooperation and hospitality. Many Thanks!

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