The Heat Under Your Feet: A Case Study of Communication Practices to Enable Shallow Geothermal Market Development

Alexandra Latham[1]

[1] European Geothermal Energy Council, Place du Champ de Mars 2, 1050 Brussels

a.latham@egec.org

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ABSTRACT

The shallow geothermal market is struggling across Europe, despite its numerous advantages and established position. Lack of public acceptance and understanding are understood to be major causes of this, and are barriers to future market expansion.

In order to address these issues, the European Geothermal Energy Council launched an ongoing communication campaign to promote and educate about shallow geothermal, 'The Heat Under Your Feet' at the end of 2015.

This paper looks at the European market and the rationale behind the belief that poor communication practices are a hindrance to development. It explains the strategy behind the campaign, considers its impact, and establishes pathways to market by presenting replicable communication models and practices.

1. INTRODUCTION

Only a tiny portion of the potential geothermal energy is as yet explored and in use in Europe. Increasing the use of geothermal energy, and strengthening the geothermal industrial sector, will allow a substantial reduction of CO2 emissions, the saving of primary energy, and the creation and sustainment of a work force with many skill levels. The potential of shallow geothermal is significant however, shallow geothermal technology is at present poorly developed.

Whilst the Shallow market in Europe is relatively stable, it is not developing rapidly or expanding, as would be expected with a European-wide shift to renewable energy.

For a number of years, developers have reported that a lack of awareness amongst consumers, local authorities, and architects and building professionals is a major hindrance to development.

The ReGeoCities project, an EU- Funded project which ran from 2012-2015, worked on the removal of non-technical barriers to development, notably with local authorities and many other stakeholders. It aimed to replicate best practice examples across Europe.

ReGeoCities project results also indicate a widespread lack of awareness among public authorities and the general public regarding ground source heat pumps, although policymakers should assume crucial role in starting the spread of knowledge and skills related to the promotion of shallow geothermal energy systems.

The project findings also show that municipalities want to raise awareness about the possible options for the development of renewable energy sources and energy efficiency amongst citizens, and then to provide tangible projects in order to remove scepticism towards shallow geothermal energy systems. ReGeoCities analysis also shows that integration of actions for the promotion and development of shallow geothermal energy systems in Sustainable Energy Action Plans (SEAP) is a step-by-step process that involves the municipality and its organisation, all local economic actors, as well as citizens. The first efforts should be to solve the issue of the lack of information about benefits, possible risks, potential, and operation of shallow geothermal energy systems, and overcome related scepticism and opposition, because shallow geothermal energy is still little known amongst civil servants and citizens. For these reasons, it was deemed important to launch a communication campaign, "The Heat Under Your Feet" to raise awareness about shallow Geothermal Energy. Launched in 2015, the project is still ongoing.

2. CAMPAIGN OBJECTIVES.

The general aim of the campaign was to build awareness about the potential of SGE technologies and promote their adoption. The measurable aim was to monitor the number of new installations in 2014 compared to 2016, using data available in 2016.

3. TARGET AUDIENCES

The target audiences are European stakeholders and policymakers, Local authorities, local administrators, energy agencies and other public amplifiers, builders,

architects, the tertiary sector, industry associations and NGOs promoting energy efficiency.

The aim is that these groups will be encouraged to think about shallow geothermal energy more frequently and more positively, and that they will use the campaign tools and messages in their dialogues with consumers.

The media and press are a secondary target, as well as final customers

The project is Europe-wide, with, national dissemination carried out by intermediate players (e.g. national associations and ReGeoCities partners)

The audience is reached with partnerships, events, and digital campaigning.

4. KEY MESSAGES

The campaign is built around five key messages developed in response to feedback from a panel of experts working in the field, and dialogue with members of the target groups.

The five key messages are

a. Shallow Geothermal is a renewable energy source which provides great energy savings and improves energy efficiency

b. Shallow Geothermal can be developed nearly everywhere

c. The technology is flexible. It can supply energy at different temperatures, at different loads and for different demands; designs of SGE systems can be adapted accordingly to the specifics of the project, building characteristics, external temperatures, etc

d. Shallow geothermal is a key resource in smart cities and smart rural communities

e. Shallow geothermal can help achieve fuel independence by decreasing the need to import fossil fuels.

5. MAIN BARRIERS/LIMITATIONS TO OVERCOME

A number of challenges were identified during the panning phase of the project.

Firstly, it was noted that it is difficult to design a European campaign which tailors to the differing needs of the target groups in diverse markets, accounting for variation between countries. It was planned, therefore, to translate as much of the material as possible, to collaborate with national associations, and to identify common the needs stakeholders representing various markets.

One of the challenges identified in the early stages of preparation is that consumers are often alienated by the highly technical nature of some descriptions of the technology. The technology may be entirely new, so basic, clear descriptions are needed. It was decided that the campaign would therefore make extensive use of illustrations and diagrams, use relatively simple language, and clear, simple descriptions of any technology- specific terms.

Once the campaign began, the main challenge was finding people to contribute content to the campaign, for example to add case studies to the database of good examples. This was viewed as an extra and unnecessary additional task by many companies, as they were required to compile information about their projects. As the campaign was just being established, the value of contributing was sometimes unclear. This problem will be increasingly easy to overcome as the campaign expands and a 'Critical mass' is reached. In the meantime, a solution was found in collecting the data from external sources, and asking the responsible organisations to give permission for their projects to be featured.

6 TACTICS AND COMMUNICATION TOOLS

The campaign uses a narrative that aims at making the technology more accessible and easy to understand for the target groups at which the campaign is aimed. This is done partly through the use of graphics, which have the advantage of making highly technical content more accessible.

Mainly digital channels are used, with the intent of reaching the widest audience possible, and aims at becoming an information hub and a reference point for shallow geothermal energy.

The first step in developing the campaign was to develop a name and branding which responded to the needs of the target groups. An advisory group of stakeholders was established to help with this task.

After some audience testing, *The Heat Under Your Feet* was chosen as it fits with the key message of *being available everywhere*. Respondents felt that the name gave the impression that geothermal was close and accessible.

Three colours were chosen to represent heat (red), water (blue) and the earth (green) and buildings were incorporated into the logo to make a connection to the final use of the resource.

6.2 Campaign resources

The campaign resources can be found online at www.heatunderyourfeet.eu. The campaign can be contacted through twitter @heatunderurfeet

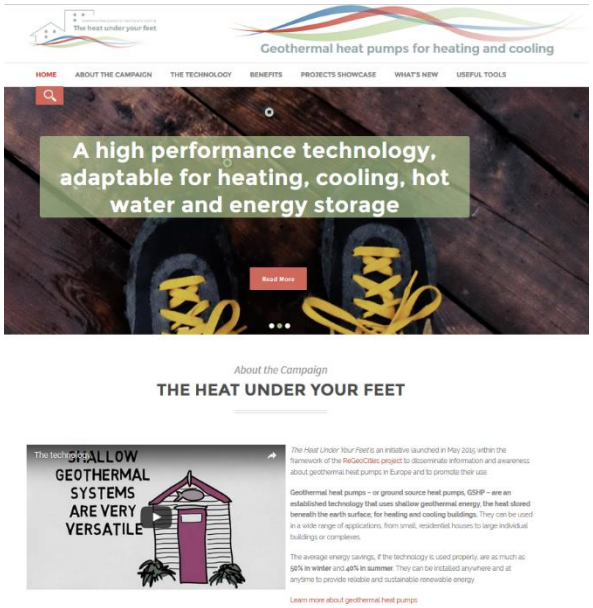
Figure 1: The campaign logo

As a motif, personal point of view photos of feet on the ground are used. This puts the end user at the centre of the campaign, and reinforces the idea that the resource is close and identifiable.

Figure 2: Point of view shots of feet and the ground became the motif of the campaign.

The website www.heatunderyourfeet.eu was developed to become the European hub for the campaign, and a decision was made to keep the content 'light', in order to not overwhelm visitors with information. Only simple, clear, and directed resources are available on the site.

It includes a blog where success stories and latest news is shared, information about the campaign, a gallery of 'lighthouse' projects, an overview of the technology, a series of animated videos about the use of shallow geothermal, and a series of factsheets on technology, benefits, financing, and smart communities.**Figure 3: Part of www.heatunderyourfeet.eu**



The next digital campaigning tool to be developed was a twitter account @HeatUnderUrFeet. The most active organisations from the target groups were contacted in advance of the campaign launch to ensure wide reach, with certain people recruited to immediately follow and share tweets. The campaign continues to use this as its main dissemination channel and method of interacting with its audience; for example, supporters of the campaign have started creating their own 'Heat Under Your Feet' photos, recreating the motif photos of the campaign.

A series of factsheets were then created covering the technology, benefits, financing, and smart communities with an accompanying short brochure on the opportunities for local authorities to develop effective regulatory regimes. These factsheets are available in a number of different languages.

Two videos were produced, one introducing shallow geothermal energy, and one explaining the technology. These videos were then translated into several languages.

It was decided that the campaign would be largely digital, making material easy to share around the contingent. However, some printed materials were prepared. The factsheets and a banner were produced.

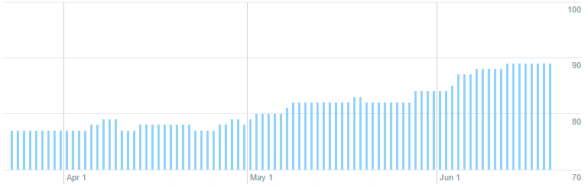
The campaign is present at geothermal events in order to attract organisations who can use the resources with their clients, and who may contribute information and new lighthouse practices to the gallery. It is also present at events for other stakeholders in the energy sector, specifically public authorities, in order to raise awareness in this group. For example, during European Sustainable Energy Week 2016 an 'Q&A' event was organised in Brussels, with those engaged in the campaign invited to submit questions about shallow geothermal. The answers to the most commonly asked questions were recorded in front of and audience and will soon be published in a new video on the campaign website.

7. RESULTS

As the campaign is relatively new, the results are as yet hard to quantify.

The general trend is that people are becoming increasingly engaged in the campaign, with the number of twitter followers and visits to the website growing.

Figure 4: Followers of @HeatUnderUrFeet (twitter)



The target groups appear to be increasingly willing to engage in the campaign, but it is becoming clear that increased effort in creating new content is needed.

8. SECOND PHASE OF THE CAMPAIGN

As the campaign enters into its second year, some changes and new elements will be added based on the reaction to the initial phase. Having tested the first elements, it is now easier to establish goals for 2016-2017.

The first goal is to double the number of projects in the showcase. This will be achieved by inviting new campaign followers to contribute projects.

The second goal is to increase the number of news stories in the website news section through increased media monitoring.

The third goal is to increase awareness amongst geothermal actors, measured by the number linking to the campaign through their websites. Flyers and promotional materials will be prepared for geothermal events to recruit new companies

The fourth goal is to increase awareness amongst public bodies and interest groups. Partnerships with organisations working on energy planning will be sought.

The fifth goal is to increase engagement with the campaign. A newsletter sign-up form will be added to the campaign website and at least two emails will be sent throughout the year updating followers on news from the campaign.

The sixth goal is to increase visits to the website by 25% compared to 2015-2016. All of the actions above will contribute to achieving this goal. In addition, an 'Frequently Asked Questions' section will be developed; common questions will be answered in videos, written statements, and infographics.

9. CONCLUSIONS

The Heat Under Your Feet is a European campaign aimed at promoting the use of geothermal heat pumps and tackle some of the challenges and barriers that leave the potential of this technology unexplored or underdeveloped in many European countries. It was launched as part of the EU-Funded ReGeoCities project.

The heating and cooling sector for buildings is today largely dominated by the use of fossil fuels such as natural gas and heating oil. This means it is contributing heavily to costly fossil fuel imports, exposure to price volatility and security of supply, and production of harmful greenhouse gas (GHG) emissions. Geothermal heat pumps are the perfect solution to replace fossil fuels and reverse this unsustainable situation. Their wide range of application, their efficiency, their reliability, all strongly contribute to provide affordable heat, to reduce emissions, and to save primary energy.

Despite their advantages, the results of the ReGeoCities project indicated a widespread lack of awareness among the general public, public authorities and builders regarding geothermal heat pumps, suggesting that an informative campaign was highly needed. The Heat Under Your Feet aims to address such shortcomings and fill the awareness gap, by serving as an information hub and a reference point.

On the campaign website, it is possible to find information on how the technology works, the benefits it can achieve, and useful factsheets available for download. In a project showcase, examples of best practices illustrate how geothermal heat pumps, thanks to their highly efficient and highly versatile nature, are the perfect technology for sustainable buildings that look at the future. More resources, like case studies and useful tools on financing and regulation are also available.

REFERENCES

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