

### 20th Salzburg Meeting of the REFORM Group Schloss Leopoldskron, August 31 - September 4, 2015

### Deconstructing "acceptance"

Social science perspectives on the siting processes of radioactive waste repositories

Workshop on Monday, August 31 and Tuesday, September 1

Organized by the Environmental Policy Research Centre, FU Berlin, in the framework of the ENTRIA project (Disposal Options for Radioactive Residues: Interdisciplinary Analyses and Development of Evaluation Principles)

Nuclear waste storage and disposal are no longer regarded as a mere "technical problem" or a question of how to "gain public acceptance" for a techno-political decision that has already been taken. Citizens in many countries manifested their will to have a say in these decision making processes and were able to block projects that they did not approve. Therefore, the issue of involving the public has gained central importance in nuclear waste governance in recent years. However, in the case of nuclear waste, strategies of involving the public that were successfully applied in other fields seem not to work. Not all processes based on information and transparency were successful. Citizens' quests moved from the "right to know" to the "right to object" and the "right to shape" decisions. In many cases, ignoring these claims resulted in the further hardening of attitudes and led to deadlock situations.

The processes leading to a site selection are highly complex and conflict ridden; they cannot be encompassed by a narrowly defined planning approach in which problems are defined, analysed, and solved in consecutive steps. Especially because of changing requirements that are difficult to anticipate and because of the many interdependencies at play, efforts to solve one aspect of the problem (whether societal, technical, or political) may end up creating new problems and conflicts. In the case of nuclear waste storage and disposal, these problems and conflicts are multiplied by the various issues at stake within the wider debate on nuclear technology.

"Acceptance" has become a key concepts in the quest for a solution to this wicked problem – while at the same time, the question what "acceptance" actually is and, even more important, how it could or should (or rather could not and should not) be achieved remains highly debated. The aim of this session at the REFORM Group Meeting 2015 is to reflect on the various factors that (co-)shape the debate on what is an "acceptable solution" and on various strategies adopted in order to generate "acceptance". In doing so, this session will shed light on agents and actors trying to enhance "acceptance" for a given solutions. At the same time, it will consider various mechanisms applied and issues touched upon in these strategies, such as economic interests at stake, compensation, ethics, governance, and participation.

The session is intended to enrich the ENTRIA project with viewpoints at both theoretical and empirical level of external, international experts. The session is articulated over 1.5 days. On the first day there will be presentations of 20 minutes followed by a discussion. The second day will consists of a workshop drawing the lessons learnt from the first day and analysing in a greater detail some topical aspects and findings.







Agenda:

Monday, 31th August (9:00 – 18:00)

9.00 - 9.20

Introduction (Achim Brunnengräber / Rosaria Di Nucci, FU Berlin)

9.20 - 10.45

Panel 1: What is the bigger frame?

Moderator: Anne Eckhardt, risicare GmbH, Schweiz

Acceptance between innovation and participation (Heike Walk, TU Berlin)

In recent years, there has been a growing awareness that acceptance is an important prerequisite for the successful implementation of technical measures such as the use of renewable energy, increasing energy efficiency or nuclear waste storage. At the same time there is a great deal of pressure on innovation research and technology development to incorporate the different perspectives and expectations of users as much as possible. In my presentation, I would like to begin with a more general introduction to the debate about acceptance, science and technology development, since I believe that it is important for a constructive debate, to understand why the technology debate has only recently opened up to a broader participation. I will also introduce the different types of acceptance and forms of participation and discuss different motivations and the functions of participation.

## The Towers of Babel: Public Ambivalence, Passive Quiescence, and Unexpressed Refusal or Resentment as False Politics (Brian Wynne, University of Lancaster)

Social science has done huge volumes of research on public attitudes — to technology, science, and risk (TSR); and on attitudes to these in both the abstract general, or in specific instances. Official policy concerns about public attitudes to TSR arose in the 1970s. These attitudes generated such expert policy, scientific and industrial concerns, because what were previously assumed to be positive public attitudes of active acceptance, towards such technologies like nuclear energy, were becoming overtly — though actually unevenly — negative, disrupting the huge emotional, technical, policy and economic commitments made in their name. Many experts were shocked at these social reactions to their self-presumed plans, asking why their own unquestioned big technology-centred ideas of progress and necessity were becoming disputed. What had changed to generate this assumed revolution? I had already shown in the 1980s that what was taken as public acceptance — lack of overt dispute -masked a whole range of more complex, including negative, aspects. I will describe this early experience of politically and institutionally self-serving expert constructions of publics; and using a case-study of UK radwaste policy in the early 2000s will address how 'expert transparency' as a popular demand in such processes might be better focused.

10.45 - 11.15 Coffee break

11.15 - 13.15

Panel 2: Acceptance and acceptability in siting projects for nuclear waste

Moderator: Sophie Kuppler, ITAS Karlsruhe



### From acceptance to ownership in siting projects (Meritxell Martell, Merience)

The OECD Nuclear Energy Agency Forum on Stakeholder Confidence (FSC) was founded in 2000 as a centre for informed exchange of knowledge and experience regarding stakeholder interaction and public participation in radioactive waste management. In its early days, the question of how to increase public acceptance for a site and concept for radioactive waste management was crucial. Implementers and radioactive waste management professionals assumed that by trying to find the best site and the best technical solution, citizens would accept the solution presented to them. This traditional "decide, announce and defend" approach implies imposing a certain project on a certain local community. The shift towards the model based on "engaging, interacting and co-operating" aims to promote ownership of the policy and the project. People must be confident that they can discuss the issues of concern with other actors, and be heard. This implies creating constructive and sustainable relationships between communities, the waste facility and the waste itself. This presentation seeks to raise awareness of the concept of ownership, as coined by the FSC, as an active feature of the host community which may extend across generations.

#### Nuclear waste governance from an environmental justice perspective (Johan Swahn, MKG)

Nuclear waste governance should aim at seeking the broader possible societal acceptance for radioactive waste management programs. An important factor for improving acceptance, while at the same time improving the safety and security of radioactive waste management facilities and final repositories, is to have a well-developed system for public information and public participation. In order for public participation to be effective there has to be a system for access to justice to guarantee access to information and that due account is taken of societal input into public participation processes. In addition access to resources for societal involvement have to be established for local communities effected by radioactive waste management facilities and for civil society organizations that engage in public participation processes. The BEPPER project under the auspices of Nuclear Transparency Watch has developed a framework for effective public information and participation that provides the possibility to evaluate national systems for public information and participation in radioactive waste management.

## Gaining acceptance and acceptability through artist involvement? (Ele Carpenter, Goldsmith College)

Several nuclear waste management agencies are working with visual artists and architects to explore the deep time implications of marking sites and embedding knowledge of repositories in a broader culture. How have these approaches changed since the 1960s, and how are contemporary artists responding to the current challenges of waste management and burial? Visual artists are interested in nuclear aesthetics and the deep time implications of the Nuclear Anthropocene to think beyond the human, but how can their work contribute to a wider societal discussion when nuclear industry decisions are still made outside democratic processes? Commissioning art is a long and complex process of negotiation including ethics and the socio-political context: so what are the motivations for inviting artists to engage with this industrial process? What kinds of curatorial knowledge are needed to enable artwork to have its own agency and volition? How are the concerns of instrumentalising art to gain acceptance addressed? What kinds of archives do we want to create for the present and the future, what kinds of stories should they tell, and how should they be funded?

13.15 – 15.00 Lunch Break

15.00 h – 17.00

Panel 3: Creating acceptance or creating acceptable solutions?

Moderator: Miranda Schreurs, FU Berlin



#### Compensation and voluntarism (Markku Lehtonen, University of Sussex)

There is a broad consensus among the nuclear waste management community about the need to build the siting process upon the principle of voluntary consent by the host community. Voluntarism is seen as essential precondition for the necessary social trust amongst the local stakeholders. In order to mitigate potential harmful effects and facilitate site construction, to compensate for damage (e.g. distributional effects), and to incite communities to volunteer, governments in various countries have designed specific community benefit packages, sometimes prepared in negotiation with the potential host community. This paper draws on the examples of Finland, France, Sweden and the UK in order to illustrate the challenges associated with the voluntary approaches and community benefit packages in radioactive waste disposal policy. While recognising the importance of the design of compensation measures (e.g. participation, distributional equity, amount of funding), it particularly highlights the importance of the local and national context in shaping the consequences of compensation packages. Key factors to consider include the "peripherality", local self-image and identity, socio-economic wellbeing, role of nuclear industry, and project history.

#### The process matters – a matter of acceptability (Pius Krütli, ETH Zürich)

Attitudes toward repository projects for nuclear waste cannot be explained merely on the basis of perceived risks, trust, or technical information. Issues of justice and fairness frequently arise when burdens and benefits are to be allocated. A fair distribution across the various parts of a given territory of the waste to be stored is unlikely to be accomplished, as it is contingent on appropriate geological formations and other factors. The process by which the specific distribution is determined and accomplished needs to be taken into account as well. Thus, justice evaluations of both the distributive outcome and the process itself, by which the outcome is accomplished, are likely to affect people's attitudes toward and acceptance of siting decisions. Survey data on site selection in Switzerland suggest that a fair procedure is more essential than a fair distribution to a consensus about the decisions made. However, contextual factors, such as the wider nuclear energy strategy of a country, may compete with procedural fairness in terms of importance. Even though fairness is a requirement it does not guarantee acceptance. It may, however, enhance acceptability from a moral standpoint.

# NIMBY and nuclear communities: How are they connected? (Tapjo Litmanen, University of Jyväskylä)

The presentation focuses on Finnish experiences in achieving gradually increasing acceptance to the final disposal of spent nuclear fuel (SNF). The municipality of Eurajoki, hosting two nuclear reactors, became the first municipality in the world to approve the final disposal of SNF within its own boundaries. How was that possible and what kinds of factors were crucial in developing increasing understanding towards the industry's need of final disposal site? For decades researchers have produced studies charting the controversy of SNF siting. These studies, ranging from technological issues to societal, cultural, political and economic questions, indicate how multidimensional the question of acceptance is. Several theoretical models or hypotheses have been developed to explain how to gain acceptance. From the research literature one can recognize different, partial, hypotheses such as participation thesis, compensation thesis, transparency thesis and trust thesis. Looking at the rejection and acceptance from the Finnish perspective it is tempting to adopt multistage and multilateral explanation emphasizing the gradual shift towards the legally required local and national acceptance by different decision-making bodies. However, even after the official decision-making the real public opinion, e.g., at the local level, fluctuate depending on the varying contextual factors.

#### Tuesday, 1th September (9:00-12:30)

Lessons learnt: Synopsis on Panel 1 (Daniel Häfner, FU Berlin), Panel 2 (Karena Kalmbach, FU Berlin) and Panel 3 (Ana Maria Isidoro Losada, FU Berlin) as input for further discussion that leads over into







a workshop with the Entria members and the presenters tackling the questions: Are there deadlocks that we can identify? Are there general patterns that we can identify or is it mostly the national / regional / local context that shapes the discourse? Where do we go from here?

#### Salzburg Meeting of the REFORM Group

The REFORM Group (Restructuring Energy Systems for Optimal Resource Management) is an international network among research organisations, universities, consultancies and decision makers involved in the scientific and technical system of research and policy consultancy in the energy field. Established in 1991 by Prof. Atle Midttun und PD Dr. Lutz Mez with the aim of fostering interaction and transfer of knowledge between research, policy, politics and innovation and accelerating the transformation of the energy system, the core group has grown to over 50 members. Cooperation takes place through international joint initiatives, e.g. projects and publications, workshops and since 1995 an annual conference at Schloss Leopoldskron in Salzburg; Austria.

This year's meeting will take place from August 31 - September 4, 2015.