

Symposium on Sustainable Power Supply Mix in the Future
Novotel Bangkok on Siam Square, Bangkok, Thailand

Public Acceptability on Nuclear and Coal Power in European Countries

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Visit & meetings in European countries : Itinerary

- Governmental Offices
- Electric Utilities
- Plant Vendors
- Industry Associations
- Financing Bodies
- Researchers/Journalists

October 27-28 

- DECC
- CBI
- WNA
- SJR
- TEPCO

October 23/26 


- SFEN
- Areva/ATMEA
- JAEA
- IEA

October 19 

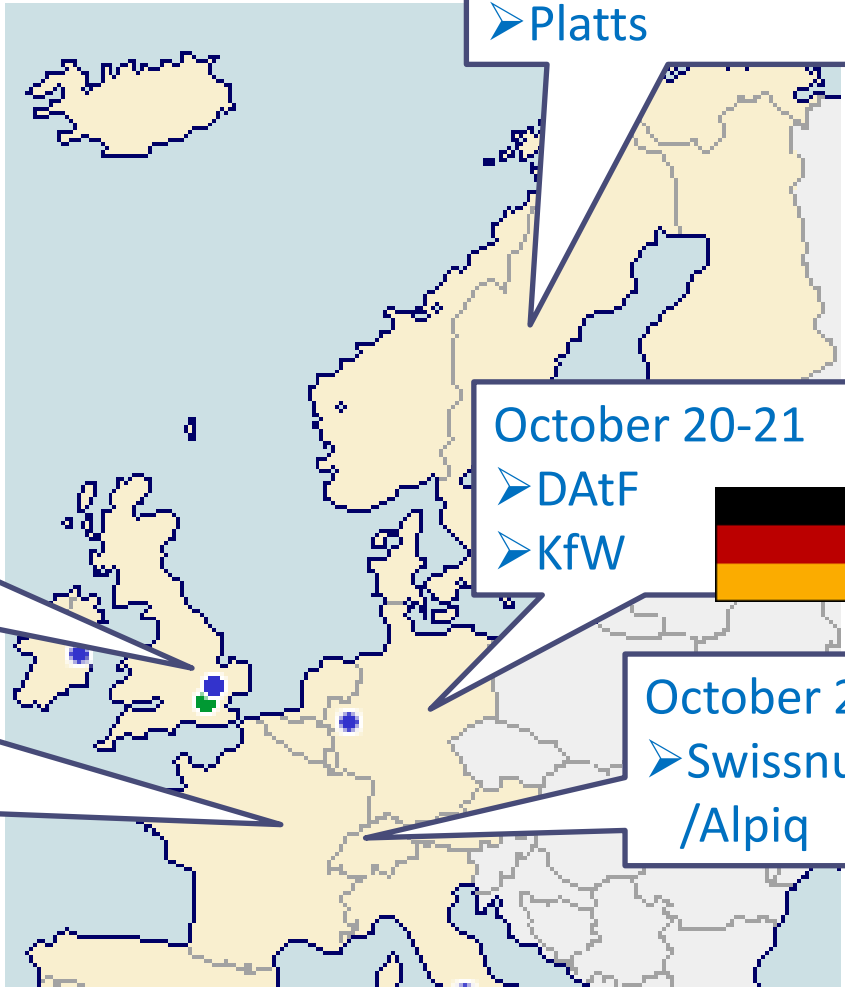
- Vattenfall
- Platts

October 20-21 






- DAtF
- KfW

October 22 

- Swissnuclear /Alpiq



Energy and nuclear/coal policy in the countries I visited

Country	Energy policy	Nuclear Development	Coal Development
Sweden 	Sustainability/ Carbon neutral	Suspending / decreasing (43% -> ?)	Little (2% -> ?)
Germany 	Zero Emission/ Anti-nuclear	Phasing out (16% -> 0%@2022)	None (without CCS) (45% -> ?)
Switzerland 	Ecology/ Environment compatibility	Transient (38% -> 0%@?)	None (without CCS) (- -> ?)
France 	Security / Sufficiency	Decreasing (78% -> 50%)	Little (2% -> ?)
UK 	Security / Low carbon economy	New builds for replacement (19% -> ?)	None (without CCS) (30% -> ?)

Questions

- What is the **major public concern** on nuclear / coal power plants?
 - Safety / environmental issues?
 - Costs?
 - What else?
 - If the concern is cleared, then the plan will go well?
- What is the **major business risk** proceeding with the construction and operation of nuclear / coal power plants?
 - Uncertainty in the safety / environmental assessment?
 - Unplanned delay in the construction works?
 - Resistance of the local municipalities?
 - Obtaining finance?
- What kind of issues would you discuss with the government or with the licensee when a new construction application of a coal power plant – with CCS or without CCS – is submitted from a licensee?
- Is there any regular communication or dialogue between operators and local communities –such as the Commission Locale d'Information (CLI) in France- with regard to new nuclear / coal licensing?
If any, how does it work?

Sweden: Acceptability, profitability, capability

- Crucial conditions for a power portfolio in the future
 - **Acceptability** including safety
 - **Profitability**
 - **Capability** including technological readiness
- Liberalization in Nordic area has lead the countries to the “unified” market

Regarding nuclear...

- Current government policy suspends the new construction project and phasing nuclear out
 - 17% increase in the nuclear tax -> heavy burden to the utilities
- **Transparency** is the key issue of information disclosure

Public people accepts nuclear due to its low generation cost

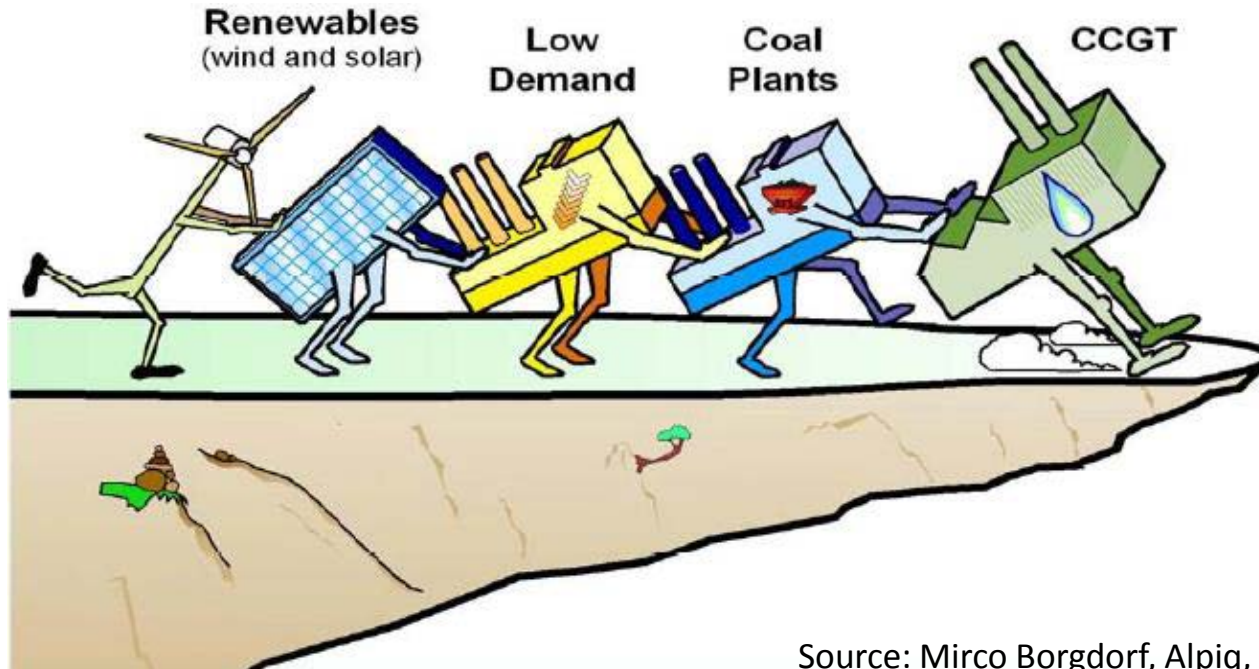
Germany: developed, matured, and again challenging

- Had developed nuclear since 1960s
 - Strong and firm messages / commitments by the government in the 1st step
 - Mutual and close communications between local governments and residents as the 2nd step
 - Information disclosure by the operator as the 3rd step
- Differences between northern and southern area
 - Northern area: many coal mines / protective policy toward the coal industry
-> coal power has been the base of electricity and life
 - Southern area: less coal resources -> necessity of nuclear
-> many nuclear units as a base load
- Political hurdle / business risk of power plant projects
 - Assessment and licensing delay -> cost overrun
 - Public resistance
 - Compatibility with EU Industrial Emission Directive 2010
 - Extremely low electricity market price
- Very challenging targets in “Energiewende”

Exporting volatile generation and low prices?

Switzerland: “merit order” pushes coal and gas out of the market

- Renewables with zero marginal costs, such as wind and solar, pushes coal and gas out of the competitive market



Source: Mirco Borgdorf, Alpiq, October 2015

Regarding nuclear...

- Public generally accepts nuclear and put reliance on nuclear safety
- High educated people are more pro-nuclear

Real merits (low electricity tariff and emissions) should be most effective to the public acceptability of nuclear

France: Open and transparent communication methods working

- Had developed and commercialized nuclear since 1950s
 - In early stage, people were not “educated” enough about risks of atomic energy and merely believed that nuclear energy can solve every problem! -> Much more pro-nuclear before 1980
 - Since 1980s, after the Chernobyl accident in the former USSR, public lost reliance on the officials and on the operators
- > “la commission locale d'information (CLI)”, an independent communication body has been established
- The law “energy transition” puts the operators obligations to disclose information to local residents through CLIs

•Article 123 [En savoir plus sur cet article...](#)

•I.-L'article L. 125-17 du code de l'environnement est complété par deux alinéas ainsi rédigés :

Elle organise, au moins une fois par an, une réunion publique ouverte à tous.

Elle peut se saisir de tout sujet entrant dans les compétences mentionnées au deuxième alinéa.

II.-L'article L. 125-20 du même code est complété par un III ainsi rédigé :

III.-Si le site est localisé dans un département frontalier, la composition de la commission mentionnée au I est complétée afin d'inclure des membres issus d'Etats étrangers.

Source: <http://www.legifrance.gouv.fr/>

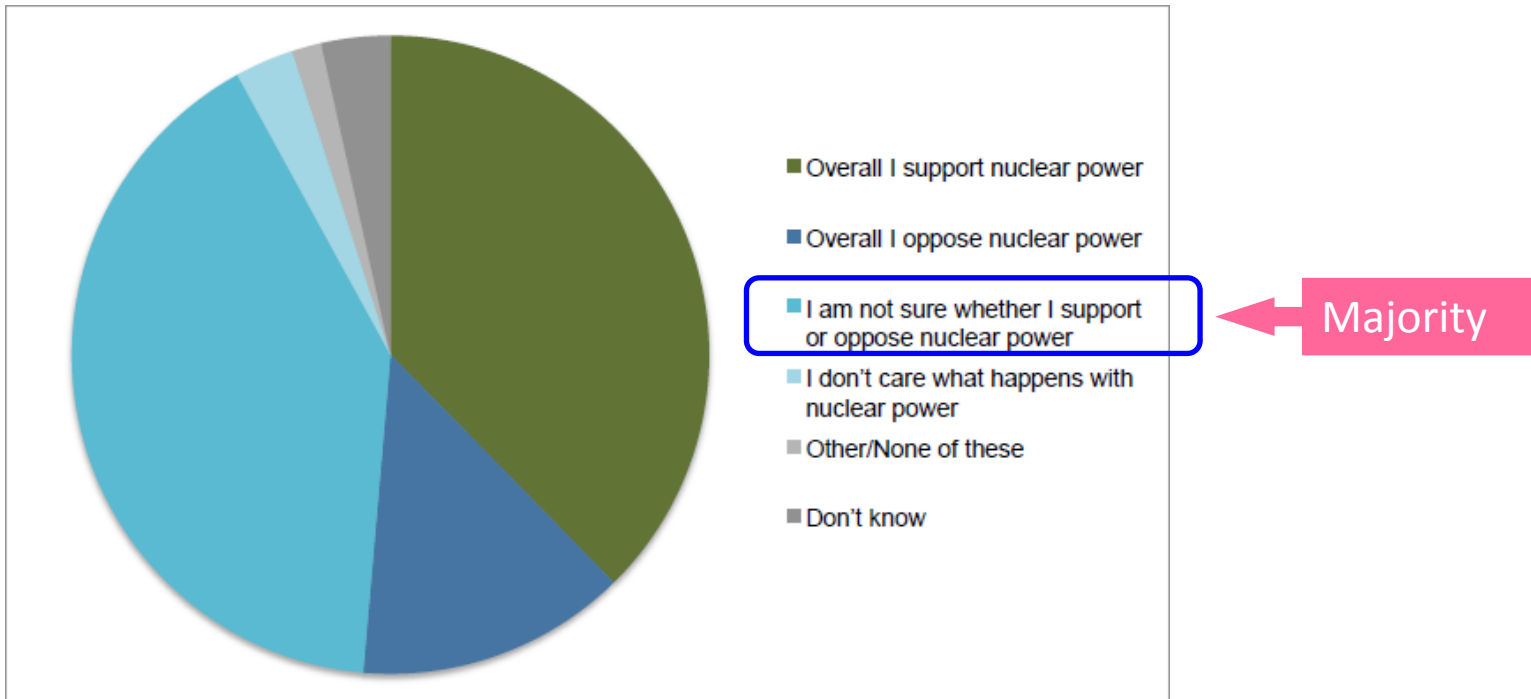
Today, all kinds of information can be accessed via the web – providing accurate and timely information when necessary is crucial.

UK: Open and transparent dialogue generally penetrated

Sciencewise projects: **The UK's national centre for public dialogue in policy making involving science and technology issues**

Ex. Public dialogue in the Generic Design Assessment of new reactor designs now proceeding in the UK by ONR

Question 5: Which, if any of the following statements most closely describes your own opinion about nuclear power in Britain today?



Cost effectiveness should be reviewed

Implications: some opinions from experts

- Stakeholder dialogue is structured conversations with interested parties including public, industry and government.
- Public dialogue broadly reflects of public views through recruitment , not a mere talk shop.
- Communication in nuclear projects is really an important issue. Developed countries have set up different ways to cope with this issue depending on their cultural and structural ways of doing things.

Will such public communication bodies be effective?

- Public communication done by institutional bodies may not work and afford poor results while costing a lot of money. Even in USA or UK it can be argue that such process is extending significantly the construction phase of nuclear project and putting a lot of pressure on the operators during operation phase.
- In developing countries it must be say that public communication is viewed as cosmetic tool necessary and sometimes required by the financial community to justify the early investment. But fundamentally most of the citizens of such countries do not participate and are not using the information for their own benefit.

-> So in summary, **these public communication bodies are failing.**

Implications: to deepen the public acceptability...

- Prompt and correct information sharing is the top priority
- Independent communicating organization with professional communication officer would be also important
- Providing benefits being brought by nuclear energy would be effective to increase acceptability of nuclear than arguing risks

Meanwhile,

- Scientifically correct information are sometimes **no use** to make highly “philosophical” people accept nuclear/coal, since we have learned the fact that less educated people in early 1950s had welcomed nuclear much more than today!

To be concluded;

- The real importance is for the nuclear industry to be accepted by the overall community – not by B to C approach but by B to B.

