Words matter – even when speaking about energy efficiency

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Keywords

barriers, cooperation, energy efficiency policy, standards, air conditioning, white certificates, Europe, USA

Abstract

The choice of words matters in energy policy, even when speaking about more technical aspects of energy efficiency. Experts from North America and Europe can be in complete disagreement – or agreement – because their definitions of key words and terms differ. The likelihood of cross-cultural misunderstandings can only increase during periods of rapid political change. Our aim is to focus on the language barriers, but since language is directly linked to phenomena "IRL" (in real life) and institutional set ups, the paper will touch briefly on the link between organising energy efficiency and the language being used to describe how it is organised.

This leads to a second kind of miscommunication that may be encouraged in some situations. As climate change – and the role efficiency could play in mitigating it – has become politicized, efficiency advocates have sought to continue policies by linking their policies to outcomes that are not as politically charged. There are often multiple benefits of energy efficiency, ranging from energy security to high student performance, but also issues such as climate, health and air-quality that can be used for this purpose. Climate related or climate relevant work may also be based on other legal or policy foundations, such as trade policy and consumer protection. These strategies may lead to conflicts of interests and awkward bedfellows that go beyond language. In this unusual political environment, we need to be nimble but not lose our ethical compass.

Introduction

Europe and the United States appear to offer excellent opportunities for cross-fertilization of energy efficiency policies and programs because they share deep cultural similarities (and sometimes even the same language). However, each side has huge misconceptions about how the other side's institutions operate and how they evolved. Worse, experts from each side often aren't aware of their own misconceptions and operating assumptions. The results are conversations where words are exchanged but actual concepts are not fully grasped or sometimes completely misunderstood.

Only part of the problem can be blamed on the English language – Europeans speak more "grammatically correct" English than Americans (in the view of British speakers) – but confusion is always possible. In Parliamentary procedure or board meetings, for example, both continents speak of a motion being "tabled", perhaps not realizing that it has the opposite meaning in British English and American English. In the energy efficiency business, Americans have a very different definition of "appliance standard" than Europeans. Imagine then how the sentence "She tabled a motion for new appliance standards" would be interpreted on the two sides of the Atlantic: in Europe to table means to propose, in the U.S. it means to remove something, such as a parliamentary motion from consideration indefinitely, i.e. discard (Merriam Webster 2017). An appliance standard in North America normally refers to a regulation or law stipulating minimum energy performance whereas most Europeans will understand an appliance standard as a term encompassing definitions, measurements, interfaces or protocols. In North America, the word also has this latter meaning, whereas the regulatory connotation of the word in Europe typically is referred to as a "regulation" and more formally for

the Ecodesign Directive an "implementing measure". A larger part of the problem rests with the differences in institutional contexts for energy efficiency and the blizzard of acronyms that further obscure their meanings.

But vocabulary can be questioned in different ways – language misunderstandings set aside. In this paper we also explore how efficiency advocates couch – or dress – their proposals in other language as a means of making them more attractive or, in extreme cases, shielding them from attack. This constant adaptation of vocabulary will be especially exciting to watch, as new political administrations take hold in North America and Europe. How will these new vocabularies affect the discussions of energy efficiency in the various fields of interest for the energy efficiency community on both sides of the Atlantic?

Power, suppression and compromise

ACHIEVING COMPROMISE

In general, language plays an important role in policy processes and actually most "output" of the policy process are words, e.g. laws, rules and guidelines (Siderius 2016). By adapting the words used, the same kind of interventions will be described by different words in different political contexts.

Apart from how terms are perceived by people in their everyday life, terms often need interpretation or operationalization before they can be used in implementation of a policy. For example, Europe named its 2007 – 2013 funding programme for energy efficiency research "Energy Intelligent Europe" in place of traditional terms such as "energy conservation" or "energy efficiency" used by governments in other regions [European Commission 2014]). Sometimes, texts or words are deliberately not clear or not defined in order to achieve a compromise: this is referred to as constructive ambiguity, a term credited to Henry Kissinger (Wikipedia 2017). The "re-branding" of energy conservation also sheds political baggage and avoids the negative connotations of using less of something.

The example of Net or Nearly Zero Energy Buildings

In energy policy an example of constructive ambiguity is the term Nearly Zero Energy Buildings (NZEB). The EU defines NZEB in Article 2.2 of the EPBD but it does not quantify 'nearly'. Instead, the EPBD requires each Member State to adopt its own definition of NZEB; this created differences in definitions from "real" zero to energy uses as high as 270 kWh/m^2/year for non-residential buildings (BPIE 2015). It is interesting to note that the *same* acronym (NZEB) in the U.S. refers to a *net* zero energy building. Historically, net zero in the U.S. means that the amount of energy used by the building is (at least) equal to the amount of energy provided by on-site renewable energy sources (Torcellini 2006). However, the new (2016) definition by U.S. DOE refers to "source" and not "site" energy. In the EU "source" energy is usually referred to as "primary" energy, whereas "site" energy is usually referred to as "final" energy. It should be noted that even with the term "nearly zero" the issue of on-site generation is important in the EU. The EPBD Article 2.2 definition of nearly zero energy building ends with "The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby".

ADMINISTRATION DISPUTE

Who is managing the program? The Energy Star Program example

The Energy Star program arose out of a dispute between the US Environmental Protection Agency (EPA) and the US Department of Energy (DOE). In the early 1990s, an administrator in the EPA, John Hoffman, sought to create a suite of voluntary energy efficiency programs, including programs for labelling and endorsing energy-efficient products. The DOE strongly opposed this idea, because it felt that only mandatory energy efficiency programs could be effective. Moreover, only DOE had the legislative mandate to establish and manage energy efficiency programs, and claimed that EPA had no role in energy efficiency. To circumvent these objections, Hoffman launched Energy Star as a "Climate Protection Program"; energy efficiency was merely a means of achieving that climate protection. A long period of friction and distrust ensued. Decades later, a memorandum of understanding – more like a shotgun wedding[1] – was signed that enabled the two agencies to share responsibilities for Energy Star.

Federal or State level? California's Emission Controls for Vehicles

California's automobile fuel economy program was also presented as a climate and air pollution prevention program. California was not allowed to have its own vehicle fuel economy regulations because this is a federal responsibility. However, California was permitted to enact measures to mitigate its local air pollution problems (i.e., by using one of the multiple benefits of energy efficiency rather than as energy policy measure as the legal basis for the legislation). California has long been a leader in emission reduction programs and, arguably, has more aggressive programs than the federal government. Local air pollution problems and climate change are a serious threat in California, so reducing all forms of vehicle emissions is a legitimate goal. At the same time, California was frustrated that the federal government had failed to implement new fuel economy standards for over 20 years. It decided to attack both the fuel economy and emissions problem with its own standards. Consistent with the goal of reducing emissions, the standards were expressed in emissions limits rather than a fuel economy standard; however, the outcome was the same. Years later, after a change in Administration, the federal government adopted California's standards, but now framed explicitly in terms of fuel economy. Now, with another change in Administration, California may find it necessary to resort to emission controls to mitigate both air pollution and climate change. The strategy employed by California goes beyond the use of language. However, language is and remains an important part of defining the strategy and ensuring that it steers clear of the federal administration's right to set fuel economy legislation.

SUPPRESSION OF TERMS AND FLYING UNDER THE RADAR

Simply don't mention it!

In the few days after President Trump was sworn in, the incoming Trump administration deleted references to climate change from its official White House website and started prohibiting

1. A "shotgun wedding" is a forced wedding precipitated by a pregnancy. It has the advantage of painting a clear image and is a good example of how clear images actually can help overcome cultural differences.

government scientists from mentioning climate change. The American Association for the Advancement of Science quickly issued a warning against "censorship and intimidation" (Johnston, 2017, Mufson and Brady, 2017). In March 2017, it remains to be seen whether any of the policies will reappear in practice but under different names. This happened in Australia, as described below.

In Australia a new Department of the Environment was created in 2013 after the Abbott government took office. At the Dept. of Environment's web site all references to climate change were deleted (environment.gov.au 2014). However, several climate-relevant measures remained in place but they were now motivated by other government priorities such as consumer protection, environmental protection and trade policy, and thus also described as such. After Turnbull took over as Prime Minister in 2015 a new Office of Climate Change and Renewables Innovation was (re)created within the Department of the Environment (Workman & Talberg 2016). An archived version of the government.gov.au site from 2 October 2015 reveals that climate change now was back as a visible topic (environment.gov.au 2015). Arguably, these reversals also reflects changed policy priorities, but it also demonstrates that a substantial amount of climate-relevant activities continued despite the fact that no direct references were made to climate change during the Abbott government's two years.

In Florida, Governor Rick Scott has prohibited the use of the terms "climate change" and "global warming" by his State's civil servants. However, some climate adaption and mitigation efforts are still undertaken in Florida who participates in Federal activities on Climate Change (Korten 2015).

When politics confuses terminology

In Sweden energy efficiency was not a widely accepted policy goal of the government in the late 1990's and the first decade of the 2000's. Proponents of energy efficiency have suggested various reasons for this, such as the long-lasting polarisation following the nuclear referendum in 1980 or the prevalence of neo-classical economists who explained that energy efficiency policy was not a government concern since it should be taken care of by the market. At the National Energy Agency in Sweden in the late 1990s, a new Director General questioned why the agency should be concerned with energy consumption related to indoor climate. It remains unclear whether scepticism arose from policy reasons or simply happened during a learning period when there was little understanding of the specifics and language related to energy efficiency technology and measures. In Swedish, cooling delivered through air-conditioning is literally translated as "climate cooling" (klimatkyla). The Director initially reportedly argued that the agency's focus was energy and it shouldn't bother about indoor climate. The solution was simple: The consultant who worked on the topic changed the term to "energy cooling" (energikyla) in the early versions of a working paper and the objections disappeared. Later the word "klimatkyla" returned from exile and was reinstated as a legitimate technical term (personal communication)[2].

2. One of the authors of this paper discussed this at the time with the consultant, who sadly has passed away and the information thus remains anecdotal. In writing this paper, the author discussed with several current and previous employees of the agency.

THE LEMON IS SQUEEZED – STAKEHOLDERS NOW NEED TO SQUEEZE OUT MEANING FROM VAGUE TERMS

For many years, some stakeholders have claimed that much of the energy efficiency potential from product policy has been fully tapped and that there is not much more to do in the area of new Ecodesign regulations and energy labelling, particularly in the area of white goods. The term "the lemon is squeezed" is sometimes heard as a vivid explanation. Therefore, proponents of product regulation sometimes re-frame their topic into the trendy "circular economy" – that is full of promises but still extremely vague. The European Commission's circular economy strategy certainly extends beyond product efficiency (European Commission 2017) and it represents a sincere attempt to find a more holistic approach for energy efficiency policy. At the same time, both the European Commission and many NGOs working on energy efficiency use the term as a substitute for traditional product or building regulation efficiency terminology and concepts. One example of both the search for a more holistic view as well as the trend to substitute traditional efficiency terminology for circular economy concepts is a recent discussion paper and workshop by the European Climate Foundation and its i24c initiative (ECF/i24c 2017a, b). The example of the circular economy represents a case of how a new terminology can be used as a strategy to continue a particular policy when the topic becomes politically charged, even if it was not the original intention.

SET THE DOGS ON THEM!

In the UK, misconceptions over Ecodesign regulations for toasters and water kettles fuelled the fury over EU meddling into matters dear to the British. One pro-Brexit politician claimed that his toast now tasted much worse after it had been regulated by the EU (Coolproducts 2016). The problem was, however, that there are no regulations on toasters. Fear of belligerent UK anti-EU media is widely believed to have hampered the enthusiasm in the European Commission to propose new regulations, and this is widely believed to be one reason for more than a year's delay. Much of the UK attack on Ecodesign was fuelled by clever use of language describing the adverse effects Ecodesign measures were claimed to have on the British everyday life.

Analysis and conclusions

We started the paper with an example of the two descriptions of Nearly – or Net – Zero Energy Buildings. Both provide great freedom in defining what is actually Zero with the definition. The terms may appear technical, but they have far-reaching political and policy implications depending on the desired goals.

It is impossible to discuss the change of language and the authority over terms and definitions without reflecting on power of funding, legislation and regulation. In its most extreme form, terms that reflect broadly accepted scientific consensus can simply be banned or ignored. It is difficult to draw an exact line between simply banning the use of certain language or actually banning the evidence-based claims that is the foundation of that language. But when a government cannot scientifically justify banning certain conclusions, then banning mentioning it or talking about it is an effective strategy to not only stop the policy but to stop discussions about the justification of the policy.

Those who believe in the science are forced to find new ways to move forward. One option is of course to simply argue that the

ban is wrong and work for a political change or change of policy. Another option is to adjust the strategy or pursue complementary strategies. A different terminology may be required in order to find political support for moving a previous issue or agenda forward. One small-scale example is the temporary minor controversy in Sweden in the 90s where a new politically acceptable term simply was invented to describe exactly the same technical phenomenon. The California vehicle standards is a different, but related strategy. Here, the State of California changed the name but also the motivation and legal basis for the standard so it fell under the State's right to regulate. Even with the changed definitions, deliberations on language were certainly an important part of the strategy to become successful.

To summarise:

- There are differences in definitions and meaning of technical language between Europe and North America, such as the one between standards and regulation.
- Sometimes the same word can be charged with different meanings in order to allow compromise, such as with the definition of "N and Z" in the NZEB acronym (nearly or net zero). An understanding of key concepts and their definition and/or policy framework can help avoid serious misunderstanding.
- By changing the motive for a policy one administrative branch can forge ahead with a policy that normally would be the responsibility of another part of the administration. The Energy Star Programme (two different branches of the US federal government) and the California vehicle standards (federal vs state government) are examples of this.
- Innovative vocabulary can be used to insert energy efficiency under new terms and phrases to protect it. We need to be nimble but not lose our ethical compass.
- Those in positions of authority often define the terms to be used and can shape the discussion.

Words matter – even when we speak about a practical thing like energy efficiency. Words, terms, and definitions need to be constantly scrutinized for misinterpretation. At the same time, careful selection of these words also offers an opportunity for proponents of energy efficiency to find alternative routes in challenging political environments.

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