## There is money in climate change

As an online participant to the Energy in Transition conference, it struck me when Gert Jan Kramer, one of the hosts of the conference and a Utrecht University professor, mentioned that the outside parties from the industry collaborating with the university in the Sustainable Industry Lab (SIL) were previously called 'non-knowledge partners'. However, after four years of SIL, these partners are now called 'experts'. The Lab went from a transdisciplinary focus on solving problems for the stakeholder, to becoming a platform on educating different actors on how to solve their problems, and elevating the societal debate based on scientific evidence. That in itself highlights one of the successes of SIL. It seems SIL brought the awareness to the university that getting your hands dirty with the "big hairy issues of society", as Gert-Jan put it, is not something to be looked down upon, even if most of these issues revolve around money.

Actually, profitability-oriented research might be the only way to reach the Dutch sustainability goals. 'High costs' is the only real argument against an energy transition. Knowledge is not going to get us there if the (economic) consequences for society are not taken into account, because profitability is the main driving factor for change. If researchers keep pretending they are above this principle, they are slowing down the energy transition. It is also not true. At the start of the conference, Gert-Jan remarked that "we don't see a great number of professors in the room". His – probably truthful – explanation was the non-existent compensation for being there.

## Knowledge and profitability

Sanli Faez initiated a discussion on open innovation and the role it can play in actualising the transformation at the speed and scale it is needed. He provided a provocative argument on why it is important for researchers not to ignore the interplay between knowledge and profitability. In his talk about open innovation and licensing in the energy transition, he explained how patents impede the development and implementation of new technologies. Patents lead to competing standards, which might be counterproductive and morally questionable. In the case of batteries, for example, varying software between different locations with PV-panels makes it more difficult and expensive to implement them. Ironically, almost all Dutch universities are in the top 100 of patent applicants in the Netherlands.

But if universities claim to foster the energy transition with their knowledge, why are they patenting? According to Sanli, it is because of the Non-Disclosure Agreements they sign when they do research for companies. That way, it is much easier for researchers to get funded. Again, money makes the world go round. Universities are part of the system that needs to be analysed in order to facilitate the energy transition. Fortunately, Sanli proposed a solution when he showed how open-sourced products can be much more profitable in the long-term. He gave the example of Opentrons OT-2, which is an economically feasible open-sourced lab automation product that helps to make the science simpler, more efficient, and cheaper.

Within SIL, there is a lot of focus on the interplay between knowledge and profitability. This is due to the transdisciplinary nature of the project. Udeke Huiskamp, the

coordinator of external cooperation, explained how SIL aids mid-sized companies by explaining how they can turn climate change into an opportunity. Seeing climate change not as some disaster that can only be averted with high taxes and ever-tightening rules but as a way of making money might be deemed immoral by idealists. Still, this opportunist way of thinking is taking away the resistance from people that are held back by the idea that sustainability only costs money.

## Getting your hands dirty

The fact that SIL helped the university to get in touch with the 'real world' became apparent from the presentations. Money was always a main theme. Besides technological developments, the projects took into account regulatory incentives, profits, costs, and even the effects on job opportunities. This shows that the sustainability researchers no longer keep inside a bubble of knowledge and idealism. They've come to understand that the only way to achieve those ideals in a capitalist society is to show their dirty hands, too, and openly think about the money. And who else to get the data from than the 'non-knowledge' partners who have been dirtying their hands at the front for years?

After an engaged short hour of Q&A, Sanne Akerboom concluded the session by asking the audience about forms of support they want from the research community and how they like to see future activities being organised. Most people seem to agree that staying connected to and informed about the activities of other researchers in the community is very helpful. The community may soon get its own portal and members directory, but until then we can stay connected through workshops and seminars like this one.