

The Curators of Social Capital

Dr. Richard Hall, a Vice Chair of the Solar Heating and Cooling TCP, discusses the role that IEA TCPs play in curating sectoral social capital and how this elusive form of capital is used by governments to efficiently deploy resources in times of crisis.

Whenever I read that the objective of the Solar Heating and Cooling Technology Collaboration Programme (SHC TCP) is to ‘advance research and development activities,’ I can’t help but feel that something is missing. The description fails to capture some very valuable aspects of what this TCP achieves in working with participating governments. But it’s not easy to find the words to describe this ‘other’ work that we do in the SHC TCP, and this is a real problem when trying to justify the not insignificant financial resources required for the programme.

I’m going to argue that alongside lots of great research and development activities, the members of the SHC TCP also play vital roles as curators of social capital in the solar heating and cooling sector. This sectoral social capital is much more than simply ‘networking.’ Although elusive and difficult to quantify, social capital is vital to the effective deployment of financial capital, especially in times of crisis.

What is Social Capital?

Since the introduction of the concept in the mid-1800s, there have been many attempts to settle on a definition of social capital. For me, one of the best definitions is provided by Lin (2001), who defined social capital as the “resources embedded in a social structure that are accessed and/or mobilized in purposive actions.” These resources that Lin refers to include many forms of social relations, including norms (standards and rules), information channels and symbols of prestige. For governments, the building of social capital is vital in improving the effectiveness and efficiency of coordinated actions.

One important aspect of social capital is that it is something that can be accessed and activated when needed. But unlike financial capital (money), there is no single place where you can store and retrieve social capital. The things which make up social capital are distributed throughout the society, and many of these things are not physical, but intangible, such as interpersonal connections, trust and sectoral knowledge. Given the highly distributed nature of social capital, it requires continuous maintenance to ensure that each component can function when called upon. Because it is so elusive, there is a real danger that you do not realize your social capital has disintegrated until you really need it.

Social Capital, the International Energy Agency and the TCPs

What does social capital have to do with the TCPs, I hear you ask. TCPs are closely affiliated with the International Energy Agency (IEA), and they provide valuable input into the agency’s work. The IEA was born during the first oil shock (1973-1974), when members of OAPEC initiated an oil embargo, causing the price of oil to triple. To protect themselves from this weaponization of the oil supply, several oil-consuming countries came together to coordinate a range of protection measures. This included the holding of 90 days of the previous year’s net import of oil and the ability to activate a demand restraint programme to reduce national oil consumption by up to 10%.

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Within the construct of social capital, the IEA can be thought of as an organization set up to enhance sectoral (energy) social capital: Resources (oil reserves) were embedded within a social structure (multilateral co-operation with pre-determined rules) so that they could be accessed in purposive actions (protection against future oil shocks). The creation of the TCPs by the IEA Governing Board in 1975 was also part of the effort to strengthen social capital within the oil-consuming countries. As solar energy is usually local (within a country's territory), then promoting the greater use of solar energy is one tool a government can use to reduce oil imports; thereby enhancing energy security. At the time, the use of active solar energy was relatively novel and expensive, so the SHC TCP was set up to 'coordinate and promote the development, demonstration and deployment of technologies to meet challenges in the energy sector.'

It is undoubtedly true that the early work of the TCPs focused on advancing research and development activities. For the SHC TCP, trying to get forced circulation solar thermal systems to work efficiently and reliably was no easy task. But piece by piece, many of the technical challenges that prevented the use of solar energy have now been overcome. We are almost at the point where solar is the dominant form of new capacity worldwide.

Social Capital and Economic Shocks

Whilst we are hopefully nearing the end of the era of oil shocks, this is not the only type of crisis governments face where action from the energy sector plays an important role. In my last Solar Update article, Optimism for Solar Beyond the Great Lockdown, I talked about the connection between the economic recovery from recessions and the solar sector.

In the crisis caused by COVID-19, governments have been forced to control the pandemic and restart their economies using economic stimuli. Given the urgent need for action on the climate crisis, large elements of these stimulus plans have been directed towards decarbonizing the economy. We see this in the EU's 'Renovation Wave' and the UK's 'Green Homes Grant,' which are both largely dealing with the decarbonization of heating and cooling.

Just like during an oil shock, the COVID-19 pandemic has presented governments with a crisis in which resources embedded in a social structure have to be mobilized in purposive actions. We know what the principle purposive action is (the economic recovery), but what embedded resources are needed to get the financial capital working to support jobs and economic growth? In the case of responding to this crisis, governments need an understanding of solar deployment, a well-functioning installer certification system, up-to-date training courses that can easily be rolled out, an effective surveillance system to prevent scheme fraud and efficient information channels to communicate the right information to the right people.

Governments Need Objective Curators of Social Capital

Whilst the SHC TCP cannot yet be described as the curators of social capital in the solar heating and cooling sector, I think the SHC TCP may be the closest thing to such an organization; and certainly, the closest if you consider our objectivity. Consider our work collecting deployment data for the report, Solar Heat Worldwide, our critique of solar standards and certification, our building of information channels and strengthening of interpersonal relationships via the Tasks and National Teams, our training work via the Solar Academy, or even our mapping of the sector via the Country Reports.

As the world moves towards net-zero carbon and oil shocks become less relevant, governments may need to give serious thought to how they respond to an entirely new set of non-oil shocks. We have just seen one type of shock in the form of an economic recession, where solar has been instrumental in getting people back to work. But there certainly will also be future 'renewable shocks'. Just as with oil shocks, having the social capital in place before they occur will be key in determining the effectiveness of governmental responses.

The SHC TCP is already playing a critical role in building social capital in the solar heating and cooling sector, and this has certainly supported governments in their economic recovery plans. But if the SHC wants to further increase its value to the IEA and its member governments, we may wish to explore this element of our work further.