Trade unions, which facilitate collaboration between employees to achieve strategic common employment-related goals, have a complex relationship with the solar sector that can be difficult to untangle. In this article, Dr. Richard Hall, a Vice Chair of the IEA Solar Heating and Cooling Programme (IEA SHC), delves into this relationship to assess whether the IEA SHC Programme should be engaging more with trade unions, and if so, on what issues.

Solar trade associations are considered key stakeholders in the IEA SHC Programme, facilitating collaboration between solar companies to achieve strategic common business-related goals. On the other hand, trade unions (also known as labor unions), which are key stakeholders in the wider energy sector and clearly engaged in climate change politics, are not considered key stakeholders. Trade unions can be important market actors, either accelerating or decelerating solar deployment. I’ve been wondering, therefore, why the relationship between the IEA SHC Programme and the trade associations is such a given, and yet the IEA SHC’s relationship with trade unions is more challenging and difficult to define.

Where Is the Solar Trade Union?

Part of the answer probably lies in the fact that there are no ‘solar trade unions’ to talk directly with, or at least, not at the scale of their trade association counterparts. That is not to say there is no union activity in the solar sector. The United Solar Plant Workers Union in South Africa is, for example, currently fighting the unfair dismissal of workers from a CSP plant. And the BlueGreen Alliance in the US, which brings together labor unions and environmental organizations, is working to maintain high-quality jobs in the clean energy transition.

But there appears to be a lack of clear unionization, with solar jobs spread beyond a single location or profession. A civil servant working in the solar sector may belong to a civil service union, an installer may belong to a builder’s union, and someone working in mineral extraction may belong to a mineworker’s union. If solar jobs were more concentrated in one place, then this would likely promote stronger union activity. In China, there is a large concentration of solar workers within a socialist market economy, but in this case, it could be argued that the function of the trade union is largely built into the State itself.

Given the lack of a single point of contact, I believe the best way for the IEA SHC to start engaging more with trade unions is to find potential intersection points between trade union activity and the solar sector. I’d like to look now at where these intersection points can be found.

The Middle Class and Affordable Solar

The first intersection point I want to explore is between workers’ wages and their ability to afford solar energy. When talking about the American Jobs Plan, US President Biden recently said that “unions built the middle class,” and as part of the Build Back Better plan, one of the key elements of their climate change program is to deliver rebates to support families shifting to clean energy. Whilst it is not the responsibility of the IEA SHC to support the development of a moderately prosperous society, we do work on developing and evaluating policies that are designed to make solar energy more affordable (rebates, grants, and tariffs). The IEA SHC does therefore have an interest in understanding the relationship between workers’ wages and solar energy rebates.

When we talk about affordable clean energy (the United Nations Sustainable Development Goal 7), a lot of the focus is on innovation to make the technology cheaper for the consumer, which is clearly very important. However, affordability will also depend upon worker wages and the amount of disposable
income available to them. Data from UK deployment shows that consumers of microgeneration technologies (heat pumps and solar panels) are generally professionals and homeowners; in other words, the middle class. So when considering rebate-style solar deployment policies, innovation to reduce the capital cost is one element, but another consideration is the disposable income of the population. When it comes to making solar affordable by raising the income of the workers, trade unions are likely to be keen to engage; to the mutual benefit of all stakeholders.

**The Real Climate Strikers**

The second intersection point I want to explore is worker rights in the solar energy sector. Today the concept of a ‘Climate Strike,’ defined as “a form of public protest intended to draw attention to climate change and the need for urgent action” (OED), is more commonly associated with the School Strike for Climate movement. But there have been in the past climate strikes in the trade union sense, involving a collective work stoppage, a go-slow, picketing, or workplace occupation, with the purpose of resolving climate-related labor disputes.

One example of a climate strike in the wind energy sector occurred in 2009, when the workers at the Vestas wind turbine manufacturer occupied the factory on the Isle of Wight to prevent the factory from closing (there were around 500 workers on the site). In this climate strike, workers were clearly aiming to protect their jobs. But many of the workers had been attracted to the job “because of the desire to produce green technologies for green energy” (Hampton 2016, p.158), and it could therefore be argued that they were choosing to work in and support the renewable energy sector.

Another famous example of a climate strike comes from the ‘Green Bans’, a movement that took place in Australia in the 1970s. The Green Bans, led by Jack Mundey of the Builders Labourers Federation (BLF), were work bans on building developments that the union deemed to be neither socially useful nor of an ecologically benign nature. For a few years, the Green Bans prevented the development of billions of Australian dollars’ worth of unsustainable construction projects and ultimately led to pro-environmental planning reforms (green buildings). One of the guiding principles of the Green Bans was that “workers have a right to insist that their labor not to be used in harmful ways” (Burgmann and Burgmann, 2017). Given the popularity of the school climate strikes, will future workers only apply for jobs within companies they consider to be clean?

**Offshoring Jobs for A Better Environment**

This leads me to the final intersection point I want to explore, which is around the geographical location of solar energy jobs. This is an area where we do see some conflict between trade unions and the solar sector. One of the classic criticisms of trade unions from environmentalists is that unions act to prevent the transition to clean energy by actively protecting jobs in the fossil fuel sector. But given the current geographic distribution of jobs in the solar sector, it’s understandable that major unions are wary of the potential ‘spatial misalignment’ of jobs that could result when a State transitions from fossil fuels to solar (Nilsen, 2021; IRENA & ILO, 2021).

There are solutions to this classic ‘jobs vs. environment dilemma,’ and in many OECD countries, we are seeing strong strategic alliances between trade unions and environmentalists develop (Soder, Niedermoser, & Theine, 2018). For the purposes of the IEA SHC Programme, the solutions originating from these new alliances will result in the redirection of innovation spending, and thus, we must be conscious of how this redirection of funding may impact the Programme.

**It’s Helpful Not to Be Hated**

Whilst the relationship between trade unions and the solar sector is difficult to unpack, and irrespective of whether the IEA SHC Programme does or does not consider trade unions key stakeholders, there are some interesting points at which we intersect. Whether that be on the issue of clean energy affordability and workers’ wages, the use of climate strikes to accelerate progress on climate change, or pragmatic solutions to the jobs vs. environment dilemma. These intersection points can offer real benefits to both parties and those they represent.

Ultimately, if solar energy is going to lead the transition away from fossil fuel generation, then, as Machiavelli wrote, it’s helpful not to be hated and despised by the people. If the solar sector’s solution to the problem of climate change results in fewer union jobs with lower wages (compared with the oil and gas sector), then trade unions are unlikely to be supportive of our plans. But if our solution includes a comprehensive plan for secure, well-paid jobs, then there are many areas where trade unions can support workers to make the smooth transition into the solar energy sector.

**Further Reading**

Nilsen, E. (2021) Why major unions are wary of the move to wind and solar jobs. Vox Media, LLC.


