

Affordable energy can and should be clean energy. How can energy equality work to deliver a greener future? This CEE Explainer Briefing summarises the key issues.

In a Nutshell

Energy equality is often not seen as being applicable to the decarbonisation agenda. However, it is clear that, without access to affordable clean energy improving for all, it is unlikely that the world or the nation will meet its targets on carbon reduction. It is equally clear that in the move towards carbon neutrality, there is a risk that some communities will be left behind and the gap between ‘energy haves’ and ‘energy have nots’ will grow.

Many of the nations that are delivering most effectively on access are those with an over-reliance on fossil fuels for their energy supplies. For some resource rich countries, such as those in the Gulf States, this results in cheaper energy that undoubtedly improves access. However, that energy is produced in a way which has a negative impact on climate change.

Decarbonisation and Energy Equality

Decarbonisation and energy equality are tied together – but not in a straightforward way. It is fair to say that whilst you could potentially achieve energy equality without decarbonisation, it is impossible to achieve decarbonisation without radical improvements in energy equality. Therefore, it is critical that all individuals, organisations and agencies with a stake in decarbonisation also become advocates for better access to affordable energy.

Without this happening, decarbonisation will not be fully achieved. Furthermore, it is entirely possible that in the move towards cleaner energy, where take up will often be by richer people and nations, the gap between ‘energy haves’ and ‘energy have nots’ will grow. This means that the move towards decarbonisation will potentially increase, energy inequalities.

Effective Leadership

Tackling the related issues of decarbonisation and energy equality will demand effective leadership from the industry, regulators, and governments around the world. The World Economic Forum believe that only a full decarbonisation of energy systems can allow the world to reach zero net emissions levels. To achieve this will require greater electrification, decarbonisation of gas and energy efficiency across all sectors.

The challenge to achieving this, is that there are competing goals and pressures which are difficult to reconcile. There is a growing need for more energy alongside a commitment to carbon neutrality, maintaining security of supply, as well as the requirement for better access and affordability.

This is usually described as “the Energy Trilemma” – the need to find a way to reconcile energy security, environmental sustainability and energy equity. Balancing these interests, and finding a way forward, will require bold policy choices from our leaders.

The Role of the Market

The issues of energy inequality and the climate emergency stem from the same root - a society that extracts a finite resource and then provides access to it in an unequal way.

By relying on market forces, that finite resource is more easily accessed by the rich than the poor. The only ways to address this are to reduce costs overall, or to use different forms of subsidy or regulation to close the gap between cost to produce and price to the consumer. This



is increasingly the role of legislation and regulation, but to close the equalities gap in terms of energy access will require more work, more commitment and more resources.

Who Does the Market Fail?

The energy market does not work effectively for the poorest communities – either in the UK or globally. There is lots of evidence that where people have better access to affordable energy that there is a positive impact on their well-being, prosperity and health.

There are different ways in which the state, regulators, businesses and other organisations can intervene in the market to improve this situation.

Some of these measures can be targeted at consumers – so increased payments through the benefits system can help make sure that energy costs fit within a household's budget. There is also an important role around consumer awareness, making sure that those who might face the most barriers to accessing and adopting new technology are supported to do so.

Other measures focus on suppliers of energy. These might include subsidies for cleaner energy, or carbon taxes which act as an incentive to invest in renewable energy. The lifetime costs for renewable energy are lower, and potentially it could reduce energy costs for everyone – helping to deliver energy equality for all.

Any solution which takes us closer to achieving energy equality needs to have a dual focus – on both on the energy supply chain and consumers.

Vulnerable and Disadvantaged Energy Consumers

There is a twin challenge for those invested in achieving energy equality – identifying those who most need support and then putting the right measures in place to help them.

On a global scale, we know that 789m people do not have access to electricity. These are often people living in Sub-Saharan Africa and South East Asia. These communities are often reliant on burning biomass to meet their energy needs.

In the developed world, research shows that those most at risk of not being able to afford energy are the elderly, those with long-term health conditions, families with young children, and young adults. These groups are not just energy poor, they will often lack the social capital to access other services. For instance, we know these groups are less likely to have a bank account, are more likely to be registered as disabled, may have poor literacy skills, and are less likely to regularly use the Internet.

A lack of digital inclusion is potentially a critical barrier. As the energy industry continues to move towards digital delivery, this makes it even more difficult for these groups to access clean and affordable energy.

To find out more about our research, visit our website – www.cee-uk.com

