

The Transition Town Network as an example of good practice for sustainability leadership

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Climate change is the biggest existential threat that our planet is facing (UN, 2021). Described as a hyperobject – a term coined by environmental philosopher Timothy Morton for things that can be studied and thought about, but not easily seen – our quickly changing environment presents a vast, complex, and tricky problem for humans to try to solve. This, according to Arai et al., is because its “causes and effects are a myriad of unpredictable, multidimensional and uncertain ways.” (Arai et al, 2018)

As well as having global and far-reaching impacts, the climate crisis has a significant impact on the Welsh environment.

Wales has seen average annual temperatures increase by 0.9C since the 1970s, and it is expected to see a further rise of between 1.3C – 2.3C by 2080 (BBC, 2021). In the most recent decade, from 2013 to 2022, we have seen an increase in 26% of summer days compared to the decade of 1991 to 2020 (ONS, 2023).

In 2016, in an attempt to halt or slow the growing impact of climate change, countries across the world, including the UK, signed the Paris Climate Agreement, committing to reduce their carbon emissions to ensure that global temperatures do not rise any higher than 1.5C (UN, 2016) However, a report from UN Climate Change ahead of COP27 at the end of 2022, demonstrated that efforts so far were insufficient to meet the Paris target and that the world was currently on track for an increase in global warming of 2.5C by the end of the century (UN, 2022).

In addition to increasing global temperatures, climate change is having other consequences on the Welsh environment. The Met Office projects that sea level rise will reach approx. 11 centimetres by 2030 and 19 centimetres by 2050, having devastating effects on many communities across Wales (ONS, 2023). Fairbourne in Gwynedd, for example, has been labelled as the community to become the UK’s first climate change refugees. This is because increasing sea level will lead to increase flooding and the devastation of homes, and flood defences will not be sufficient to hold the sea water back from the community (BBC, 2020)

Because of these expected increases in global warming and sea level rises, and the other significant changes it will bring to our environment, it is now more important than ever for communities and governments at all levels to be considering climate change adaptation and increasing the resilience of their villages, towns and cities.

Climate adaptation is the process by which we can seek to reduce the risks posed by the changes to the climate, and is described in the UN Sustainable Development Goal, SDG 13, as strengthening “resilience and adaptive capacity to climate-related hazards and natural disasters.” (UN, 2023)

The role of community and local level action is a significant one for tackling the climate and nature emergencies, in particularly the role of communities in adapting to growing climate risks.

A report by NewLocal, a think tank on transforming public services, found that there are three features to local action that make it so important to ensuring sustainable and resilient communities;

1. Responsiveness – communities can respond quickly to issues and conditions in their local area in a way that national and international action cannot match.
2. Legitimacy – Designing action at this level has legitimacy with local people, and therefore does not suffer from the pushback or criticism that national top-down approaches do.
3. Power over adaptation – as mentioned above, the need to adapt and become resilient to climate change, is now more important than ever. And it can be argued that it is now more important than looking to decarbonise. Communities are much better placed to facilitate adaptation to consequences of climate change as they are unique to them and their local area (New Local, 2021).

The report suggested that this level of action, people taking meaningful action in their day to day lives on climate change, can not only mobilise significant progress towards to climate resilience but can also create an ecosystem that “permits braver policymaking from the top” (New Local, 2021)

An example of local level climate action in our local context in Wales is the network of Transition Towns.

The Transition Movement started with Rob Hopkins, a teacher in Kinsale College in Ireland, who, in 2005, created an energy plan with his students. The plan set out the vision for a fossil fuel free town that included actions on local food production, renewable energy, waste treatment etc. The plan was presented to the local town council and received unanimous support.

Following the success of this work, Hopkins, after moving to Totnes, started Transition Town Totnes in 2006 (Arai et al, 2018).

In addition to the success of the energy plan in Ireland, the Transition Movement was inspired to start by two significant environmental challenges, climate change and peak oil.

As discussed in the introduction of this paper, climate change is the greatest threat our planet is currently facing and presents a significant challenge for our communities and environment to overcome.

Peak oil theory was advanced by Marion King Hubbert, in 1956, and is the theory that sources of oil have either already reached, or will very soon reach, their maximum production capacity and will start to diminish significantly in volume by the middle of the 21st century (O’Leary, 2023). A global lack of oil will have significant impacts on our economy and society through lack of supply and through an increase in the price of oil (Fraser, 2023). Whilst the Transition Movement note this as one of the key challenges the movement is set up to combat, it should be noted that critics of Hubbert’s theory claim that it is impossible to know whether peak oil has occurred, or will happen, as we are not aware of all of the available reserves (Lallanilla, 2015)

Since the first Transition Town was established, the movement has grown across the world. Groups are currently in operation in 48 countries the world, and are based in towns, cities, universities and schools (Transition Towns, 2023).

The movement has numerous groups in Wales in 15 towns across mostly mid and south Wales.

These towns are Abergavenny, Usk, Monmouth, Caerphilly, Cardiff, Carmarthen, Neath, Swansea, Llandeilo, Carmarthen, Tenby, Narberth, Fishguard and Lampeter (Transition Towns, 2023)

Transition groups across the UK have been the hub for a number of climate projects to start and the network now has many sustainability successes to their names.

Transition Bath and Transition Corsham installed 3MW of solar photovoltaic panels in their own community energy project, and have supported the installation of another 3MW with other community energy groups. They achieved this by raising £10million in community shares, and profits of £65,000 have been redistributed to other low carbon and fuel poverty projects (Transition Network, 2016)

Transition Bro Gwaun in Fishguard opened the Transition Community Café in 2008 to stop food ending up in landfill. Volunteers at the café collect food from local businesses and people, that is otherwise going to end up in the bin, and turn it into affordable meals. The café prevents approximately 600kg of food going to landfill each month, and saves approximately 21tonnes of carbon a year (Transition Network, 2016)

Other projects have included community farms and orchards, local currencies to keep money in the local economy and repair cafes to teach people to fix items instead of sending broken things to landfill and buying new (Transition Network, 2016)

Carmarthen Together is an example of a transition group in a hyper local context. The group is newly established and has begun a series of consultation events with local community organisations and members of the public to begin discussions on how they can work together to create “a local environment in which everyone can flourish.” (Lafferty, 2023)

The Transition Towns movement is rooted in a set of principles that groups uphold in their work and actions to supporting their communities to reduce emissions and become more resilient.

This paper will explore a critical reflection on how the principles of the Transition Network demonstrates that this model of community level action on climate change provides a leading example of good practice on sustainability leadership, through academic theory or through examples of the principles in action in similar projects.

1. Respect resource limits and create resilience

The Transition Network describe this principle as the key value for the network, and is based around the urgency to reduce carbon emissions, reduce reliance on fossil fuels and make sure use of natural resources is wise (Transition Network, 2023)

A report by WWF, ‘Thriving within our planetary means: reducing the UK’s production

and consumption footprint by 2030' said that within the UK we are using approximately three planets worth of resources every year (WWF, 2021). Earth Overshoot Day, which marks the day by when we have used the ecological resources that our planet is able to regenerate in a year,(Earth Overshoot, 2023) is moving closer and closer as our carbon footprint continues to grow. This year, in 2023, the day takes place on 2nd August, and following that date we will be living on 'borrowed' resources from future generations.

The same report by WWF explained that for us to meet planetary limits we must reduce our global footprint by three quarters by 2030, which includes reducing domestic greenhouse gas emissions, and those from flying and shipping by 39% (WWF, 2021).

2. Promote inclusivity and social justice

Knowledge around the social impacts of climate change, and how climate change impacts on different communities of people, is growing. Research by the Joseph Rowntree Foundation found that, in the UK, lower-income and disadvantaged groups are least likely to contribute to climate change, but are most likely to be negatively affected by it. Further more climate change, and the environmental and social impacts it will bring, will worsen the impact of poverty. The way in which we try to tackle climate change can have an impact too and there has been some evidence that policies to mitigate climate change can actually deepen inequality (Banks et al., 2016).

Ensuring that inclusivity and social justice is at the heart of the transition movement can ensure that any actions undertaken by the community to adapt to climate change and become resilient are accessible, meet the needs of the unique communities they work within, and do not increase the inequalities of climate impact.

3. Adopt subsidiarity

The Transition Network described this principle as the intention to “not centralise or control decision making, but rather to work with everyone so that it is practiced at the most appropriate, practical and empowering level.”(Transition Network 2023) In this definition the network aims to give decision making to the local community transition groups of how their groups are run, and what priorities they choose to focus their time and energy on.

Subsidiarity is a concept widely used within governance and government structures and is defined as a demand “that the central state defer to its subordinate ranks of government and civil society wherever possible just as solidarity demands that no one's needs be ignored.” (Colburn, 2008), For example, in the UK, we see this happening with the devolution of policy making around areas like education and health to the Senedd, and the further in Wales with further devolution of powers and decision making to councils and national park authorities. The concept is based on the knowledge that the level of government closest to the community can best serve the needs of the community.

The Transition Network use this same concept in how their groups are organised.

As mentioned earlier in this essay, the role of local communities and community action on climate change and climate risk is key to ensuring resilience and mitigating the impact of our changing environment. This is because communities hold expert knowledge of their local area and understand the unique challenges and opportunities that exist within this area (Morgan et al., 2021)

The Centre for Public Impact, a think-tank that supports government to reimagine structures so that it better serves peoples, reported that meeting the targets of climate action, for example the Paris climate agreement, involved “deep-seated transitions in economies, institutions, politics, governance processes and people’s behaviours”, and without engaging communities in setting these policies and targets they are unlikely to be successful.(Centre for Public Impact, 2021)

Therefore, to ensure that climate action is impactful, and bought into by the whole community, is it important to recognising their unique position, their expertise of local knowledge, and adopt the principle of subsidiarity to engage them in climate action. This movement of power to being “bottom up” shows strong leadership from organisations and government, and also empowers leadership in individual communities.

There are a number of examples in Wales where this concept of subsidiarity has been put into action in the climate action movement, and although outside of the Transition Movement, provide evidence for the impact for this principle.

The examples that this paper will look at are citizen’s assemblies, which puts civil society at the centre of policy making on decarbonisation.

There are been a number of citizen’s assemblies in Wales. GwyrddNi is an assembly that took place from May 2022 to April 2023 in five different areas in Gwynedd. The consultation process, which was based on the knowledge that “those best placed to shape the future of a community are the people who live there”(GwyrddNi, 2023) was run by a partnership of community organisations. They asked the 430 that engaged with the assemblies “how can we in X area respond locally to climate change?”.

Based on the responses they received in the assemblies GwyrddNi then produced an action plan for tackling the climate crisis that is unique to that area, and based on the community’s unique knowledge and expertise.

For example, Dyffryn Ogwen’s plan has a focus on local energy production and engaging people in climate action through a writers group, and a Gwyl Hinsawdd – a festival that highlights the climate emergency. Dyffryn Nantlle had a focus on food production and particularly traditional and modern methods of food storing and pickling (GwyrddNi, 2023)

Another citizen’s assembly was held in Blaenau Gwent in 2021. The assembly was organised by the county council and engaged 44 residents from the county.

Members of the assembly were asked “how can we tackle climate change in Blaenau Gwent in a way that is fair and improves living standards for everyone?” (Blaenau Gwent County Council, 2021) Five key recommendations were chosen from the

feedback given in the assembly – integrated transport, encouraging walking and cycling, low carbon housing new builds, retrofit of existing housing and more woodlands and green space. These recommendations were formally adopted by the council as priorities in their action plan for tackling the climate crisis. (Blaenau Gwent County Council, 2021)

- 4. Part of an experimental, learning network.**
- 5. Freely share ideas and power**
- 6. Collaborate and look for synergies**

The next three principles of the Transition Network are being examined together for their similarities in being about partnership working through sharing learning via networks and collaboration.

The role, and the importance, of experimentation in climate governance is one that has been well researched over the years. In this context experimentation means to “investigate transformations towards sustainable socio-technical systems” (Sengers et al., 2019) and differs from scientific experiments as it uses society as the ‘test site’ and introduces new and alternative practices to re-shape, re-think and re-imagine the social reality (Sengers et al., 2019).

Kivimaa et al., found that experimentation on climate governance led to six key, and positive, outcomes. It led to a changed discourse and new visions, it led to new technologies, to changes in infrastructure. Experimentation also led to policy changes, new business practices that encouraged the development of renewables, and lastly it led to an increase in citizen engagement in climate change and therefore an improvement in the practices and behaviour of members of the public. (Kivimaa et al., 2017)

Whilst there has been no research on the effectiveness of the learning network created by the Transition Network, there has been extensive research into the role that networks play in accelerating action on climate change. An example of this research, is the dive undertaken on the effectiveness of the C40 Cities network.

C40 Cities is a network of 96 mayors of cities from across the globe that have come together to tackle the climate crisis (C40 Cities, 2023) by committing to deliver climate action that is aligned with the Paris Agreement of limiting global warming to 1.5C. The cities that are members of the network represent approximately 20% of the global economy, which evidences the global reach and impact that this network can have (C40 Cities)

Research has shown that the network, since its establishment in 2011, has supported approximately 14,000 pilot climate projects (Nguyen et al, 2020) by providing a venue for socialisation, policy learning and collaboration between member cities to support the delivery of these experiments (Lee, 2012).

- 7. Foster positive visioning and creativity**

The Transition Network website explains this principle as “developing and promoting positive possibilities.” (Transition Network 2023)

Creating a vision, or a vision statement, has been practice within businesses and organisations for many years to inspire and motivate staff (Meyer-Cuno, 2021) The study of futures, and scenario planning, have also been used in other sectors such as agriculture, defence and food (Fergnani, 2018)

Visioning has an important part to play in climate action planning, particularly climate adaptation planning, i.e. how we as communities will need to adapt to changing weather, sea level rise, food scarcity etc. Nalau and Cobb argued that visioning is at the core of adaptation, as it is about “envisioning futures and trying to decipher which options and pathways enable us to reach the desired future states.” (Nalau et al., 2022)

Biermann suggests that visioning overcomes two particular challenges;

- Bridging the gap between formalized analytical models and fuzzy social realities, by making the formal and scientific more salient to affected stakeholders, and helping to ‘harden up’ the experts’ understanding of community perceptions and attitudes; and
- Helping to re-couple the costs of mitigation born by the current generation with the benefits of avoided harm accruing to future generations, by offering glimpses of possible future scenarios in the community, using visual media which can make the future seem more ‘real’. (Biermann, 2007)

It supports communities to overcome these challenges because of its ability to make climate change explicit to local communities, accelerate capacity-building, create spaces for open conversations, and shift mindsets. (Sheppard et al, 2011)

Research has also found that visioning can ensure that we achieve a future that is more equal and just.

As mentioned at the start of this paper, there is a significant role for communities in driving action on the climate crisis, both in terms of finding innovative ways to reducing greenhouse gas emissions and finding ways to adapt and become resilient to its growing impact. Communities are impactful and powerful leaders on the climate crisis, inspiring brave and transformative behaviour from both their peers and governments.

The Transition Towns movement and network, provides an excellent framework for communities to follow when taking local climate action. The principles that make up this framework put communities at their core by ensuring that decisions on how to act, and when to act, are in the hands of the communities most impacted by that challenge from the changing climate.

As has been seen from the research examined in this paper, this form of network can have a ripple effect by encouraging others to act as well, and providing a safe space for sharing ideas and replicating successful projects – ensuring that the impact

spreads. And importantly, the changes, when led by the community in this way are just and equal.

The Transition network provides an excellent example of sustainability leadership in action.

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