

As part of a partnership project between the University of Aberdeen, Anrijs Visvaldis Forsts, the author of this research, was asked to investigate an effective monitoring and evaluation framework for Vattenfall's Unlock Our Future Fund's environmentally-focused, community-led projects in Aberdeen City and Aberdeenshire. According to reports the region's growth and economic stability has been dependent on the oil industry since the 1970s, earning it the symbolic title of "The Oil Capital of Europe". The author suggests that, due to past decisions of investments in the oil industry as well as stability of the regional economy being largely dependent on industry, the region is currently in a state of path-dependence and industrial lock-in with the oil and gas industry, affecting the region's sustainable transformation efforts despite contemporary intentions. As Vattenfall aims to create a fossil free future within one generation, it is suggested that the use of mindful deviation, de-locking and path creation concepts should be embraced by the Unlock Our Future Fund and its panel. Each individual environmentally-focused, community-led projects is seen as a new layer on the path away from reliance on the oil industry and towards regional sustainability, revitalization and economic stability.

The author provides a framework for project selection, monitoring and evaluation incorporating these concepts, which was created by combining Framework for Path Creation Process developed by MacKinnon et al. (2019) as well as The Four-Capital Method of Sustainable Development Evaluation created by Ekins et al. (2008). The dimensions of the framework are: social capital, human capital, natural capital, manufactured capital, institutional

environment, economic, social and institutional actors, regional and extra-regional assets and market creation. Case studies were created evaluating Vattenfall's Unlock Our Future Fund projects for: Aberdeen Sailing Trust, Alford and District Men's Shed, Camphill Rudolf Steiner Schools, Community Energy Scotland, Fittie Community Development Trust, Huntly and District Development Trust, Meldrum Amenities Improvement Group and Westhill and District Men's Shed.

AIM AND OBJECTIVES

With this in mind, the author aimed to evaluate and monitor the impacts of community-led environmentally-focused funding programmes as means for sustainable development with a particular reference to Vattenfall's Unlock Our Future Fund in Aberdeen City and Aberdeenshire.

To reach the aim, the author:

- Researched how historical path dependence and industrial lock in, deriving from the oil industry, affect Aberdeenshire.
- Investigated how to influence de-locking, mindful deviation and path creation towards regional sustainability in Aberdeen and Aberdeenshire, using sustainable developments.
- Evaluated how the environmentally-focused, community-led projects of Vattenfall's Unlock Our Future Fund foster sustainable development in Aberdeenshire.
- Made recommendations on how the impacts of Vattenfall's Unlock Our Future Fund projects can best be captured in the future.

RESEARCH FINDINGS

Influence of historical path dependence and industrial lock-in from the oil industry in Aberdeenshire:

- The oil industry has brought wealth to Aberdeenshire and its people, but the single industry reliance has also created economic slowdown and risks for future growth of the region.
- The oil industry has negatively affected the culture of the region creating high expenditure and demand for carbon intensive goods.
- The oil industry has made supporting industries depend on it. Additionally, the region has been de-diversified and weakened several traditional land-based industries.
- The regional economic stability of Aberdeenshire has been dependent on the oil prices.
- Barriers to sustainable transition have been created by oil companies, the people who rely on money from them, as well as institutional actors.

Influencing de-locking, mindful deviation and path creation towards regional sustainability in Aberdeenshire:

- Sustainable developments such as the EOWDC act as visual reminders of sustainability and change individual behaviours. Future oil developments threaten this message.
- Despite the influence of the oil industry, regional sustainability culture, which has been described as "thrifty", remains and can be utilized to foster change.
- There is potential to utilize the regional knowledge and capacity, that has been created by the oil industry, to achieve regional sustainability.
- Participation of all regional economic, social and institutional actors is necessary to achieve change in the timescale described in the latest IPCC report.

Impact of Vattenfall's Unlock Our Future Fund's environmentally-focused, community-led projects on sustainable development in Aberdeenshire:

Social capital

- Improved community hubs have reduced social isolation, especially during the pandemic.
- Impacting people beyond local communities is helping for individual behaviour change across the region.
- Most organizations have the capacity to help everyone in their community to some aspect.
- Organizations should involve communities in decision making.
- Initiatives to help disadvantaged individuals should be carried out.

Human capital

- Community organizations can provide valuable sustainability education that leads to behavioural change.
- Almost all community groups have improved physical and mental health to some level.
- Cultural initiatives can help expand the organizations outreach.
- Help for vulnerable people (children, people with special needs and seniors) seem to have strongest impact.

Natural capital

- Reducing emissions is only a small part of what community organizations should be doing.
- Providing green spaces have an impact on most other evaluation dimensions.
- Enabling circular economy through reuse initiatives is great for changing behaviours.
- People participate in green initiatives (litter picks, community science, offsetting) if provided with a chance to do so.

Manufactured capital

- Integrated solutions have more impact as they can be used as exemplar projects to inspire other groups.
- Reducing operational costs can increase capacity to improve impact in other dimensions and generating match funding.
- If a project has long-term indirect impact, as in the case of Community Energy Scotland, this should be reflected in the score as well.

Institutional environment

- Collaboration, partnerships and existing grants of organizations should be recognized during award selection as the cumulative long-term impact is likely to be better.
- The more channels used to engage with partners and communities, the more impactful projects appear in long-term. These should include messages during events, initiatives, social media activity, websites posters and news outlets, if possible. Even if people do not directly participate, they subconsciously start thinking about the sustainability message.
- The Unlock Our Future Fund should organize events and other opportunities for awardees to network with each other.

Economic, social and institutional actors

- Partnerships are crucial to drive change, groups should set these up with everyone they can.
- Number of volunteers and people supported should be recognized during project selection.
- Exceptional individuals that inspire others within their networks could be recognized by the Unlock Our Future Fund to inspire others to be exceptional. For example, initiatives could involve inviting them to panel-discussions or write articles for the Foundation Scotland reports.

Regional and extra-regional assets

- Community groups should be recognized as regional assets that can drive change.
- Groups have the potential to create projects that directly support regional development goals.
- Organizations should use their knowledge, experience and capacity to build the capacity of other regional players if given a chance to do so.

Market creation

- Most organizations are under-resourced, therefore, projects helping generate funding will be beneficial to improve impact across the framework.
- Groups should constantly try to create more sustainability initiatives with partners and within communities, instead of sitting on laurels.
- Future plans of organizations matter and should be recognized during project selection.

Recommendations for capturing future impacts Vattenfall's Unlock Our Future Fund projects:

- Projects with long-term impacts should be prioritized.
- The outreach of the funded organization is crucial for more effective regional transformation.
- Integrated projects should be favoured.
- The grants' impact value for money should be considered.
- The awardees should be chosen strategically, capturing strengths in each of the eight aspects in the authors proposed evaluation framework, year by year to the impact of the Unlock Our Future Fund.
- The proposed framework should be used during selection, on completion of the project and several years later to establish a benchmark and the real long-term impact of each project.
- The workbook created by the author will allow the UoFF candidates and awardees to provide better answers than using interviews.
- Foundation Scotland should improve the 24-point grading scale used by the author to a 40-point scale once quantitative measurements are used to assess projects.
- Year-round networking opportunities should be made for UoFF awardees. This will encourage collaboration between groups and help with path creation towards sustainability.