

Annotated Bibliography – Pro Renewable Energy in the 1970s

Pioneers and their Ideas on Renewable Energy: Undercurrents and Radical Technology in the 1970s

1. Giacomini, Giada., *Indigenous Peoples and Climate Justice: A Critical Analysis of International Human Rights Law and Governance* (Palgrave Macmillan, 2022)
This book covers the how climate change affects indigenous communities around the globe. The foreword covers the adoption of the Declaration on the Rights of Indigenous peoples (UN 2007), showing how indigenous people have historically been victims of western capitalism. It covers different research projects that work around climate justice for indigenous communities, including the meaning of climate justice, relationships between climate change and human rights, the involvement of indigenous people in decision making, and the violation of environmental human rights. Chapter 7 especially argues the case for rethinking human rights-based approaches to climate change through the right of ecological integrity, which has no bias towards economics, and includes biological integrity and function of humans being dependant on the integrity of the natural environment. This book is useful in looking into how politics affects the development of climate change, especially focused on specific groups, like indigenous communities who are commonly not involved in politics yet are some of the most effected by climate change.
2. Herring, Horace., *Living in a Low-Carbon Society in 2050* (Palgrave Macmillan, 2012)
Herring focuses on how the UK should be able to reduce carbon emissions while keeping an affluent lifestyle, which includes reducing CO2 emissions by at least 90%. He describes what political and social changes need to be made to achieve this goal, splitting it into three parts. Part one covers the policy, examines the needs, methods, and policies required for a low-carbon society. Part two focuses on case studies, giving present scenarios of low-carbon living and how it can be successful on a smaller scale. Part three goes into the personal stories of people living in low-carbon societies, as discovering people's feelings about this type of society is crucial top it's realisation. Overall, for Herring, 40 years from when the book was published is a long time, and the depletion of fossil fuels is likely to lead to more conflict, which Herring believes is avoidable by turning to renewable energy. This book shows how the future of renewable energy needs to develop to properly combat the effects of climate change, it includes personal stories of how renewable energy works in day-to-day life.
3. Mitchell, Catherine., *The Political Economy of Sustainable Energy* (Palgrave Macmillan, 2008)
In this book, Mitchell describes how the UK governments approach to market regulations isn't sufficient regarding the need to respond to climate change. The complexity of the energy system needs to be recognised and energy policies implemented by the government face complex challenges with climate change, commonly falling short in 4 key areas: technology and innovation, the role and relationship of the government and its relationship to principal actors and stakeholders,

the privatised and regulated energy sector, and human consumption and behaviours. Mitchell argues that the current political paradigm is not able to deal with the 4 key factors effectively, nor its urgency.

4. DeGrasse Jr, Robert, et al., *Creating Solar Jobs: Options for Military Workers and Communities* (Mid-Peninsula Conversion Project, 1978)

This booklet describes the way the solar energy sector can create jobs for those in the military in a way where skills only need to be transferred, not learnt. It states how solar heaters create as many as 100,000 jobs in California, as well as other industries like photovoltaics and wind turbines. It showcases how developing solar energy helps reduce inflation, is energy efficient, provides employment, and develops community. The booklet is split into three parts, part one covering solar job skills and employment, part two covering options for military workers and part three covering community solar development. This is useful for seeing how renewable energy was helpful in more than just climate change but was also a way to expand the jobs market and create new opportunities for those with specific skills that would be useless elsewhere.

5. Lovins, Amory. B., *Soft Energy Paths: Toward a Durable Peace* (Pelican, 1977)

In his book, Lovins argues that far too much energy is being consumed and too much waste is being created, which is only worsened by the use of nuclear energy. He believes that instead of nuclear power, soft technologies should be implemented, based on energy income. These soft technologies include forms of renewable energy like solar, wind, and biomass. The book is split into three sections. Section one covers the concepts: the failures of hard energy, energy efficiency, soft energy technology, and the politics surrounding it. Section two cover the numbers: the economics, energy quality calculations and interpretations, and the costs to run soft energy technology. Section three looks towards a durable peace: sociopolitics, values, and nuclear power and proliferation. This is useful for the viewpoint that in the 70s nuclear waste was often seen as dangerous, and that many advocated for the use of renewable energy.

6. Boyle, Godfrey and Harper, Peter., *Radical Technology* (Wildwood House, 1977)

This book covers a range of new and old technologies that are meant to help reduce the use of fossil fuels and promote sustainability. It is split into food, energy, shelter, autonomy, materials, communications, and other perspectives. It is very useful for seeing more small-scale examples of alternative technology that can be done at home. It has a wide range of projects that cover most aspects of day-to-day life. The preface states that the book is about technologies that can create a less oppressive and more fulfilling society. It is a compilation of proposals that aren't to fix everything but are going in the right direction. It is a bunch of projects, some small scale some large scale, that are all energy efficient and have climate change and cutting carbon emissions in mind, and especially cutting out the need for nuclear power.

7. Breach, Ian., *Windscale Fallout: A Primer for the Age of Nuclear Controversy* (Penguin Books, 1978)

This book is an assessment of the British government's decision on the Windscale findings, it traces the birth of opposition to official nuclear power plans and looks ahead for the protagonists in Britain and abroad. It covers the controversy of whether a

reprocessing plant should be built at the site of Windscale, going over the misinterpretation of the Parker report on the Windscale fire by the government, and they wished to hide the findings to not scare the public away from nuclear power. Breach takes into account the different reactions from the newspapers at the time, as well as having a postscript account of what happened after the Parker report was released. It is useful to get a sense of the opinion of nuclear power in the 70s, especially regarding the possibility and reality of nuclear disasters.

1. Sharman, Hugh. The Oil Industry: Unemotive Exploitation, *Undercurrents*, no.3 (Autumn/Winter 1972)

This article describes how the western world is very much reliant on fossil fuels, no matter the attempts to bring in alternative energy. Sharman believes the view of the economists is too simple, as they only see goods being produced from materials and fuel, ignoring the waste that is also produced. He thinks that the dependence of western countries on foreign oil is politically significant, as it allows for western countries to be under the influence of oil producing countries because of their reliance on fossil fuels. The collection and distribution of oil is also potentially causing marine pollution all over the globe. Sharman argues that oil consumption should be cut back, it is a policy that is unlikely to be pushed forward by governments or oil companies, but individuals should be more aware.

https://issuu.com/undercurrents1972/docs/uc03_jan19b/38

2. Morgan-Grenville, Gerard. Interview: The National Centre, *Undercurrents*, no.8 (Oct/Nov 1974)

This is an interview with Gerard Morgan-Grenville, who is the chairman of the society for environmental improvement ltd, which is a registered charity to link organisation between big business and the environmental movement. Gerard, with his background in business, believes that links to big business are needed for the environmental movement to make decent headway, as money is needed to make an impact. He believes that having more important people involved in the society is useful because those higher up tend to be more effective in getting things done.

https://issuu.com/undercurrents1972/docs/uc08_jan20a/14

3. Taylor, Colin., As Below So Above, *Undercurrents*, no.11 (May/June 1975)

The article demonstrates the revival of building with rammed subsoil, a soil which contains lots of pebbles so cannot be pressed by a machine to use in regular building materials. It is an easily accessible material that can be used to make good quality low-cost buildings. This article includes a DIY of how to make the blocks, including what to add to them and how to build with them.

https://issuu.com/undercurrents1972/docs/uc11_jan18a/24

4. Elliott, Dave., Workers and The World Unite, *Undercurrents*, no.12 (Sep/Oct 1975)

This article covers the work of the Lucas Aerospace Combine shop stewards committee, who have proposed the right to work on socially needed alternative technologies. It looks into the role of trade unions as combining its traditional defensive economism with a progressive view of alternative productions that benefit society and the

environment. It presents the idea that workers should be able to choose to develop more alternative technologies because there is an increasing demand to move away from fossil fuels.

https://issuu.com/undercurrents1972/docs/uc12_jan19a/12

5. Crabapple, Crabapple: Twin Oaks Comes to Wales, *Undercurrents*, no.12 (Sep/Oct 1975)

This article covers the creation of Crabapple commune from the example of Twin Oaks in the US. Walden Two, written by B.F. Skinner, describes a hypothetical community of around 1000 people living mostly self sufficiently on a large area of land. It involves cooperation, equality, people over profits, aiming for a 'good life', expansion of communities, an empirical approach to problems, and the use of the potential for good behaviour modification techniques using positive reinforcement. Twin Oaks was started in 1967 by 8 people in the US. It combined ideas from Walden Two and counterculture ideas. This moved over to Wales with Crabapple, starting with 6 adults and 2 children. They financed it themselves, although had an agreement in place should the project fail. They overtook the running of a wholefood shop in Cambridge that was owned by 2 of the members. They have a system of 2 managers per area of work to carry out policy and use a labour credit system.

https://issuu.com/undercurrents1972/docs/uc12_jan19a/12

6. Elliott, Dave., Job Creation: How Saving Energy Could Save Jobs, *Undercurrents*, no.15 (Apr/May 1976)

Elliot covers how investment into nuclear power jobs should be turned into other types of programmes, as to create many more jobs than the only few thousand made from nuclear power programmes. He believes there is a need for more immediate answers to unemployment issues, and that alternative energy can provide a base for a more diverse industry. There is also potential for not just short-term job creation, but also long term if the government were to put money into solar housing projects. Potential areas for job creation also include waste recycling, insulation, and solar collectors. Elliot argues that the arms race with America puts more focus on the armament industry, which is more capital incentive, but takes focus away from renewable energies like wind and solar.

https://issuu.com/undercurrents1972/docs/uc15_jan22a/32

7. Pettitt, Ann and Wade, Barry., Good Squat Guide, *Undercurrents*, no.21 (Apr/May 1977)

This article discusses the need for an unofficial land register to help with reclaiming land for the people because of the mass amounts of abandoned and empty houses in the countryside that are brought as a part of the land yet never occupied. During a time in which more and more people are moving to the countryside, this guide tells people how to move into empty properties on owned land. This is needed because the weather is causing a lot of the empty buildings to slowly deteriorate, meaning they won't be repairable in a couple of years, which is a waste of resources.

https://issuu.com/undercurrents1972/docs/uc21_feb11a/10

8. Theiss, Beth., Iron Age Farm, *Undercurrents*, no.21 (Apr/May 1977)

This article explores how the methods from Iron Age farms, which were created to help study the archaeology of Iron Age settlements, may prove useful in informing us about the alternative movement. The Iron Age was a very self-sufficient time and there could be many techniques that can translate into modern settings in order to help with self-sufficiency.

https://issuu.com/undercurrents1972/docs/uc21_feb11a/24

9. Partridge, Martyn., Energy Fixer, *Undercurrents*, no.21 (Apr/May 1977)

Partridge has a discussion with one of the UK's leading energy analysts Gerald Leach about the £3.6m investment into a solar energy research programme. The UK and other European powers were somewhat late to the party in showing interest in new energy sources, compared to the US and Scandinavia. There has been more research into using solar energy for homes, transport, and agriculture, which using the large investment will help move towards less use of fossil fuels and more reliance on solar power throughout the UK.

https://issuu.com/undercurrents1972/docs/uc21_feb11a/36

10. Walker, John., Trouble at Mill, *Undercurrents*, no.23 (Aug/Sep 1977)

This article investigates the Oxfam Wastesaver project that was started to help recycle household waste. Walker describes his day-to-day working in the scheme, and how the mill and its workers are run. The idea of a new recycling centre in Leeds was introduced by Oxfam, which would have made the failing mill a scapegoat for the losses of Wastesaver, until it was suggested that money could be saved by instead investing in the mill to fix the problems causing it to work at a loss. In order for the mill to run properly a working party was set up, this helped to reorganise the mill and make it more efficient at recycling household waste.

https://issuu.com/undercurrents1972/docs/_uc23_feb13a/18

11. Opus., Opus, *Undercurrents*, no.23 (Aug/Sep 1977)

Opus is a group in Gartreuch near Glasgow that stands for One Purpose United in Service. They lease a farmhouse with 5 acres of land for the creation of a religious retreat. Opus used recycled materials to renovate the farmhouse, using old greenhouse glass to make solar powers in order to heat the water. They also endeavoured to restore a windmill to make a wind pump to get water to their 40 members. The group show how using recycled materials can cut costs to create a functional get away for children and adults to escape to.

https://issuu.com/undercurrents1972/docs/_uc23_feb13a/38

12. Randall, Rosmary and Southgate, John., Emotional Plague, *Undercurrents*, no.25 (Dec/Jan 1977/1978)

This article explores why collectors and co-ops often fail and why there is a belief this can be fixed with a Work Democracy. An Emotional Plague brings heightened emotions within a commune or co-op which leads to gossip and jealousy among the group, turning into groups splitting up because of doubts about others and those with more power. Emotional Plagues are often caused by a growing gap between the goals and ideas of members and the reality of the group's actions. A Work Democracy helps solve this by creating sub-groups in communes and co-ops, categorising people based on

their interests, so they work in an area aligned to their personal goal to help things run smoothly and stop tensions arising.

https://issuu.com/undercurrents1972/docs/__uc25_feb17a/12

13. Reid, Mike., Findhorn Revealed, *Undercurrents*, no.25 (Dec/Jan 1977/1978)

This article covers the Findhorn commune, how it has expanded and how it works. It is an incredibly large commune with over 200 residents and over 40 guests per week. The guest visitors pay to stay there for a week, learning about the commune, the people who live there, and even get involved with different sections of the work. These funds help Findhorn stay open, as their only other source of income would be their gardening or exporting manual labour. Findhorn was created as a centre of light for people to become closer with nature. The work is split into different groups and people assigned roles to fill, each group has a focaliser, someone who is not in charge but knows the flow of output and how to keep things running, as to not create an authoritarian rule. The commune is not fully self-sufficient and does not use many alternative technologies. Its main source of eco friendly output is in its garden, which is well known for creating large produce from less-than-ideal soil conditions.

https://issuu.com/undercurrents1972/docs/__uc25_feb17a/16

14. Elliot, Dave., AT – Art & The State, *Undercurrents*, no.28 (Jun/Jul 1978)

In this article Elliot believes that the government's spending on alternative energy sources may ruin alternative technologies in the UK. Wind, solar, and wave power have all been given some funding to either implement or develop the technology, however this funding is minimal compared to nuclear power. Furthermore, little research is being done into alternative technologies because of the risk from the lack of funding. Elliot fears that if the government continues in this way, then alternative technology will become another backwashed part of capital that is overlooked and never utilised because of the dependence of fossil fuels and their dominance over the market.

https://issuu.com/undercurrents1972/docs/__uc28_feb23a/20

15. Watson, Geoff., Maximill, *Undercurrents*, no.28 (Jun/Jul 1978)

The Maximill wind turbine is a prototype that was developed by the environmental group New Age Access to provide electricity for a craft pottery. New technology on the mill allows it to rotate vertically to capture wind from any direction, it also has a shorter support tower and can be maintained more easily due to its generator being at ground level. This new type of windmill is much more efficient than regular windmills and can be more easily implemented for everyday energy usage. The windmill only needs to be started using a small motor to get the turbines moving until they can move on their own, constantly running no matter the wind direction.

https://issuu.com/undercurrents1972/docs/__uc28_feb23a/30

16. Small, Tony., Hull Housing, *Undercurrents*, no.32 (Feb/Mar 1979)

Small explores a new proposal for low energy council housing in Hull that uses wind power to generate electricity. 32 houses are to be built that have extra insulation to ensure heat gets trapped inside to reduce energy used on space heating. The houses will be powered by one 3-bladed windmill and backed up by solar power.

https://issuu.com/undercurrents1972/docs/__uc32_mar07a/28

17. Dawling, Pam., Crabapple Revisited, *Undercurrents*, no.34 (Jun/Jul 1979)

This article revisits the Crabapple commune in Wales after three and a half years. Dawling, who is a member of the commune, wants to give a perspective that comes from someone who understands how the commune works with first-hand experience. They face little money troubles, apart from their fifteen-year loan repayments, and get most of their income from the whole food shop. They have resorted back to weekly pocket money after trying a communal spending pool as it is easier to not have to document each personal purchase. The work is split by time, so everyone works equal hours a week to keep things fair. Bigger jobs are also allocated during weekly meeting where those who wish to do so can take the jobs. Over the years they have lost a few members and gained few, this may be because of their previous belief in labour points and behaviour modification, which they no longer implement as they have realised it does not work for them.

https://issuu.com/undercurrents1972/docs/__uc34_mar12a/10