MOVEMENT MONITOR

Measuring the Impact of the Australian Climate Movement

Movement Monitor Methodology Overview

September 2023

What is it?

Movement Monitor is a two year project that will develop a comprehensive movement measurement methodology and apply it to the Australian climate movement. The project is run by researchers at the Commons Library with input from academics, international movement experts, and many stakeholders in the Australian climate movement. The project builds on the Australian Climate Movement Map survey undertaken by the Sunrise Project with input from the Commons Library in 2022. Movement Monitor is coordinated by Holly Hammond, (Commons Library Director) and the Research Lead is Dr Robyn Gulliver.

Findings from the project will help identify movement wide interventions that have the potential to increase movement capacity, coordination and effectiveness. The mapping process will involve an extensive data collecting exercise and analysis process to help the movement maximise strengths and resources, minimise duplication, and identify gaps for groups, funders and supporters to address. The team is currently seeking feedback on our proposed methodology, which is outlined below.

What are we measuring and how will we measure it?

The project aims to gather and analyse a diverse range of data to provide an annual snap-shot of climate movement impact. Impact will be measured against a number of defined indicators of movement capacity and power. These indicators will draw on past research into social movements as well as the identified priorities of stakeholders in the Australian climate movement. The indicators will allow for easy comparison over time, identifying areas of progress, decline or stagnation.

Movement Monitor will measure:
- The size of the movement, measured through
    - Groups and individuals emerging and subsiding over time
    - Number of members and supporters
- The focus and activities of the movement, including:
    - Issues focused on by each group
    - Tactics used by each group
- The diversity of the movement, specifically
    - Constituencies involved in each group (cultural and geographic)
    - Lived experience of people of non-dominant identities in the movement and barriers to justice, equity, diversity and inclusion
    - Engagement of diverse sectors in the movement
- Strategic alignment and connectivity between groups, specifically
    - Group and campaign networks
    - Networks between groups and external sectors
- Means and capacity to mobilise and engage numbers of people in strategic action, specifically
    - Financial resources available to groups
    - Number of staff and volunteers in each group
    - Skills and roles within the climate movement
    - Formal structures of groups
    - Communication platforms used by groups (websites, social media pages)
    - Access to power (eg media mentions, references made by politicians to specific groups, campaigns or tactics)
- Narrative power and levels of passive support, including ability to shift the story, beliefs and assumptions, examined through
    - Longitudinal media analysis
    - Polling data
    - Supporter sentiment (where data is available)
- Outcomes of movement activities, including
    - Electoral outcomes
    - Policy outcomes
    - Positions of political parties
    - Behaviour of corporate targets
    - Recruitment of high profile allies and supporters

Where will we gather our data?

Our novel approach will collect data from a variety of sources, including websites, social media pages, media databases, publicly available annual reports, Australian Charities and Not-for-Profit Commission reporting, polling data, survey responses and interviews/focus groups. Outcomes of movement activities will be measured through analysis of Hansard, local, state and commonwealth legislation, political party

platforms including positions adopted at national conferences, media releases, and shareholder AGM motions.

For more information see the Appendix: Further Detail on Movement Monitor Research Activities.

What will we produce?

The primary output of the Movement Monitor is an annual impact scorecard. We aim to maintain consistency in the impact measures used, in order to track change over time. In addition to the impact scorecard, the following outputs will be developed:

- The Movement Monitor website with an interactive map of groups and campaigns, a campaign depository, and a searchable campaign database
- An open source methodology and academic paper outlining the movement monitoring methodology and how it can be applied to other movements
- Articles presenting findings across all components of the project.

How can you be involved?

At this stage of the project we are seeking feedback on the proposed methodology. You can email your feedback to holly@commonslibrary.org. If you would like to provide feedback via an online meeting or phone call let us know. You may wish to provide feedback in relation to:

- What we are measuring
- How we are measuring it
- Data sources
- The key questions you would like the research to answer, to inform your work in the Australian climate movement

If you have access to data that may be useful to this project please contact holly@commonslibrary.org.

A survey of organisations in the Australian climate movement will be launched early in 2024. We appreciate your support in promoting the survey and ensuring it is completed by as many organisations as possible.

To stay up to date with Movement Monitor sign up: http://eepurl.com/iy-S1I

Appendix: Further Detail on the Movement Monitor Research Activities

1. Tracking and scraping group websites

Method

Tracking the growth and decline of groups involves an annual review of the online and offline movement network. An extensive database has already been developed, as well as the code for automatic website scraping and text analysis. This review will build on established work mapping the movement in 2017 and 2021 (data can be found on https://www.auenviromap.org/home/campaign-viewer/). This website data provides a rich source of information on movement activity, changes over time, and strengths and weaknesses. We propose using this data to obtain information on the five key measures of movement strength listed below. Elements of this methodology have been published in a range of academic, peer reviewed papers ([listed here](#)).

Outputs

1.1. New groups

The analysis already undertaken in 2017 and 2021 showed that well over 200 new climate groups emerged between 2017 and 2021. Some groups began online in isolation (e.g. 'Regional Australians for Climate Action'), others as local groups within an established network (e.g., 'Australian Parents 4 Climate Action Pakenham') and others as new networks in their own right (e.g. the declare movement: 'Architects Declare', 'Comms Declare'). It is expected that this rapid growth will continue, and heavily influence the opportunity for individuals to join the climate movement as well as generate greater power for change.

Inclusion criteria

Groups will be included in the climate activist database if they undertake some form of advocacy on climate change and promote their activities online in some form. Specific inclusion criteria are:

- **Climate change**. Group websites and/or social media pages will be reviewed to ascertain whether they focus entirely on climate change ('e.g. Climate Action Network Australia'), or will be included in the dataset of climate activism groups if they focus on climate change in one of their activities (e.g., run one climate change campaign amongst other campaigns on other environmental issues).
- **Engagement in advocacy.** Groups will be included in the dataset of climate advocacy groups if their activities align with the Australian Charities and Not-for-profit Commission definition of advocacy, which is: "activities which are aimed at securing or opposing any change to a law, policy or practice in the Commonwealth, a state or territory, or another country" (Australian

Government, 2012, p. 1). A search will be undertaken of each groups' website and/or social media communication. If they use any of the following words related to this definition they will be included in the database: "campaign," "project,""advocate", "lobby", "influence," "fight," "activist," "movement," and "take action."

● **Communicate online.** Groups will be included if they maintain an online presence that enables analysis of their activities. This online presence must indicate that they exist as an ongoing community of action (e.g., a Facebook page with few posts, no apparent group behind it, and no other presence either in ACNC databases, a website, or in other environmental networks will be excluded).

1.2. Inactive groups

Inactive groups will be identified through a) tracking website redirects, b) tracking the dates on live websites and c) measuring the activity of their social media pages. Common characteristics of inactive groups can then be ascertained.

1.3. Change in geographic location

The existing database of ~2,800 environmental groups already identifies the geographic location of their head office and the geographic extent of their activities (e.g. local, regional, state or national). The graph below provides an example of potential outputs. Spatial statistical analysis can be run on active, inactive and new groups to identify any common geographic patterns.

Two geographic location characteristics will be collected in the group and campaign methodology: 1), the location of their office or primary location (e.g., Newcastle, NSW, or Karratha, WA) and 2), the area in which they operate (local, regional, state and national).
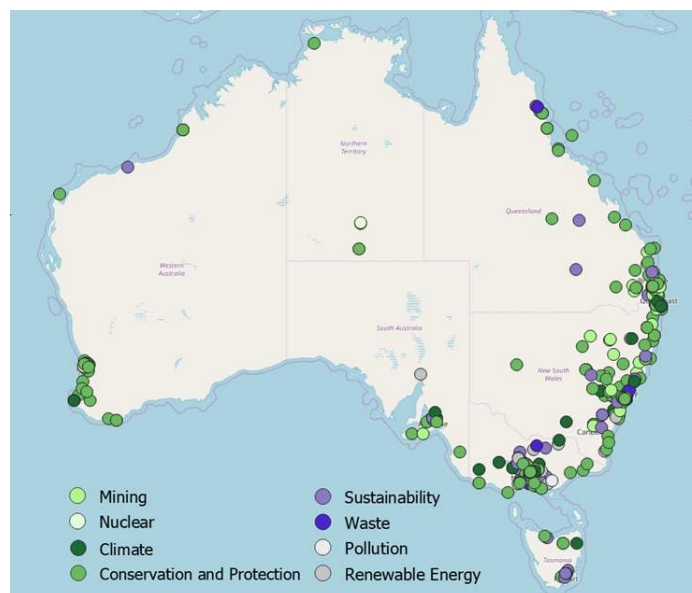
1.4. Changes in movement messaging

Groups use their websites and social media as a forum for communicating their approach to climate advocacy. Automated analysis of the full-text websites can tell us what key issues and messages climate groups are communicating and how these are changing over time.

Social media analysis is more difficult to analyse (given that much of the content are shares and likes of other group's content, rather than their own words), and is also more difficult to undertake without paid access to APIs. This is particularly so with Facebook, Instagram, Snapchat, Youtube, etc. X (formerly Twitter) data is now difficult to obtain and also not representative of environmental messaging. To facilitate access to data we will be seeking to build partnerships with the organisations that have APIs or similar resources to obtain raw social media data.

The following table provides an example of text analysis outputs using website data. These topics and words were generated via automated analysis of 492 Australian environmental group websites. The four climate topics appeared as the most commonly used terms in 114 of the 492 websites. Tracking the change in climate focus over time will enable more effective resource development, funding and support for the climate movement.

Topic	Words	Number of Websites with Topic Co-Occurrence
Climate + mine	Mine, community, campaign, coal, Australia, nuclear, action, water, people, support, energy	86 (17%)
Climate + health	Protect, health, report, Queensland, member, donate, change, nation, policy, media, submission	16 (3%)
Climate + finance	Coal, Australia, fossil, company, fuel, fund, super, invest, Adani, change, global	7 (1%)
Climate + reef	Cairns, event, reef, donate, develop, plastic, sustain, mangrove, dredge, community, clean	5 (1%)
Total		114 (23%)

1.5. Change in group focus over time

Groups working on climate change are often engaged in other environmental issues. They also take different strategic approaches to their climate change activities. Analysis of the online material of new groups emerging each year can:
- Identify whether new groups are working exclusively on climate change or in tandem with other issues
- Identify their broad strategic approach and focus.

The figure below provides an example of how this method can ascertain the overall historical trend in environmental movement group focus. Data was obtained via website scraping of 497 environmental groups in 2019.

Australian Environmental Activism Groups
Growth over Time
1883–2019

Legend:
- Conservation and Protection
- Climate
- Sustainability
- Mining
- Renewable Energy
- Waste
- Pollution
- Nuclear

# 2. Tracking and scraping group social media

Method

Identifying the types of activities and events (including protests, public meetings, workshops, etc) that groups organise and the issues they are working on will help in effectively directing support and funding for mobilisation.

Most groups list their events on their Facebook pages. Facebook pages are the most effective locations to identify event data, as most groups do not list their events on their websites, and many groups including grassroots, volunteer run groups often do not regularly update their website. This task involves visiting each Facebook page once a year and manually scraping the event list. Currently a dataset of 36,541 Facebook events has been compiled of events promoted by all environmental groups between June 2010 and January 2020. Of these events, 8,607 were "co-hosted". This occurs when two or more groups list the event on their Facebook page/group. In this impact project we will use either the full dataset of all events where suitable, or only the unique events (i.e., the event database with co-hosted duplicates removed) for specific outputs.

Outputs

2.1. Identifying the number of events groups hold each year

The example figure below shows data on the events organised by environmental groups 2010-2019.

Unique Events Promoted by Environmental Groups on Their Facebook Pages, 2010–2019
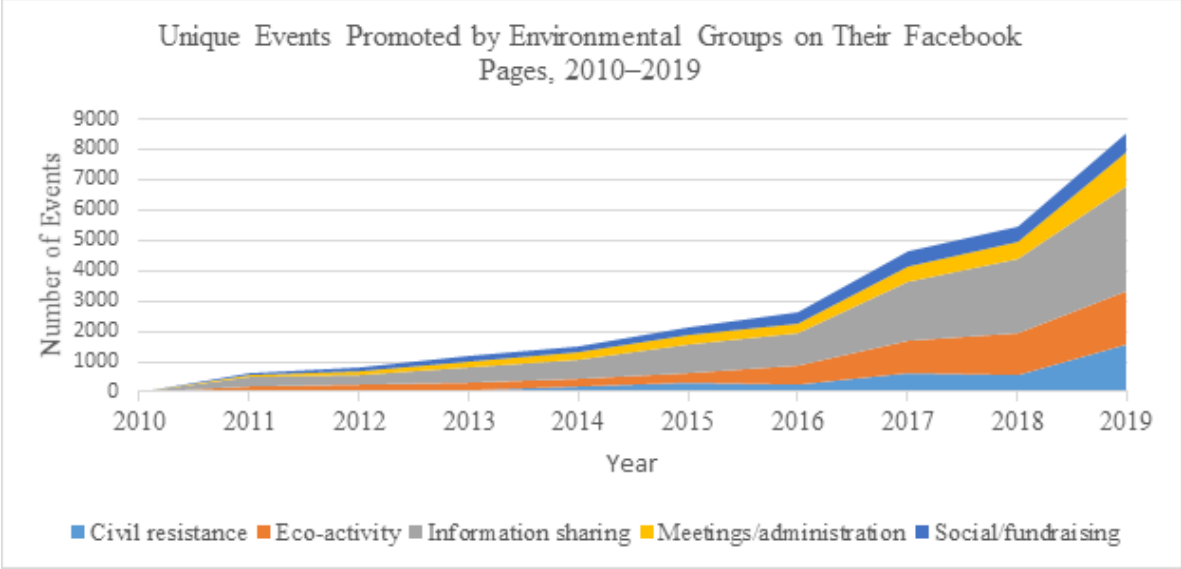
2.2. Grouping activities and events

The data collected in 2.1 will be automatically analysed (via an excel Macro which has already been established) to group events into different categories. Each category of event can also be coded into types. The following figure identifies the number and categories of civil resistance events being organised by environmental groups between 2010 and 2019:

Civil resistance tactics (all environmental issues) 2010-2019
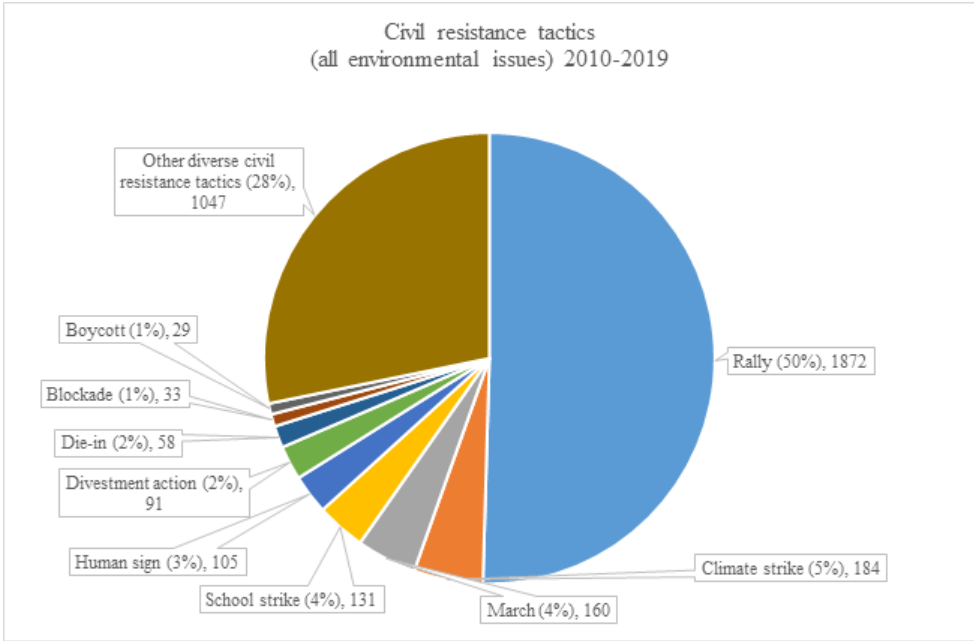
3. Survey collection and analysis

Method

The Sunrise Project developed and ran a comprehensive movement mapping survey in early 2022 with assistance from the Commons Library. This survey can be reproduced on an annual basis. The benefit of the existing Sunrise survey is that information on movement characteristics such as diversity, strengths and weaknesses and tactical/strategic priorities can be ascertained. Furthermore, if the survey is maintained over time and findings regularly provided to the movement as part of the overall movement mapping report, a higher number of groups may be interested in completing it. This will help provide insights which are not able to be captured through other methodologies used in the movement mapping process.

4. Campaign and projects analysis

Method

Campaign and project analysis involves identifying the goal, target, timeframe and issue of all campaigns and projects organised by the movement, and tracking the outcomes of these campaigns and projects over time. Projects are included to encompass the 'solutions' work that many climate advocacy groups are engaging in, and can include examples such as the development of a renewable energy zone, community engagement projects and electric vehicle trials.

Data from three sources can be used to undertake this analysis. The following sections explain each in turn.

4.1. Update campaign and project outcomes

A database of ~1300 environmental campaigns organised by groups between 2015 and 2021 has already been developed. Each campaign lists a large number of characteristics, including the group/s running the campaign, the campaign target, the campaign goal, the campaign issue and its geographic location.

Each year an analysis of the outcomes of each campaign can be undertaken. This specifically means that an online search is engaged in to identify whether the stated goal of the campaign is achieved or not, and whether the campaign is still underway. This is a time consuming process that is unable to be automated, however the data obtained from it is extremely informative in identifying effective groups, campaign topics and targets and areas of greater power to effect change.

Similarly, a database of past projects will be compiled. Websites from groups in the database will be reviewed on the Wayback Machine to compile a list of past projects. The stated goals of these projects will be identified and then an online search will be undertaken to ascertain whether these goals were achieved.

4.2.   Obtain new campaigns and projects from website data

An automatic text analysis of the scraped website data is able to pull out each occurrence of the word 'campaign' and 'project' across all website text. These occurrences are then extracted and manually reviewed to identify whether the text refers to an actual campaign/project, and whether it is a new campaign/projector one already listed in the database. Each new campaign/project is then analysed to identify the campaign/project goal, target, issue, and geographic location. One limitation of this method is that only campaigns/projects listed on group websites are able to be identified. However, given the very high number of campaigns/projects listed in 2017 alone (960 separate campaigns across 497 group websites), the representativeness of data from websites is robust.

4.3.   Incorporate Sunrise survey data on campaigns and projects

The Sunrise survey asked respondents to list up to five campaigns they were currently working on. Many of these campaigns do not appear to have been listed on their group websites. As a result, this data can provide useful supplementary information to include in the master database. Another question about projects/solutions work could be added to the existing survey dataset to collect information on this element.

4.4.   Create a dedicated website submission data

In order to maximise the number of campaigns and projects included in this movement mapping analysis, it is recommended that a dedicated website page be created for groups to submit details about their own campaigns and projects. This website can be a simple form asking for the group name, campaign/project title, issue, goals (primary, secondary and other) and timeframe. Additional information can be requested for groups to share background information on the campaign/project, provide updates on its progress, and share resources developed for each. The website manager can then review information and share connections between groups working on similar campaigns or projects.

Given the significant numbers of groups running independent campaigns and projects on very closely related issues, this site may offer an important opportunity to build collaboration and shared learning across the movement. This page can be a standalone website, or be hosted by a centralised group.

5.   Network analysis (groups, campaigns and projects)

Method

Network analysis involves identifying connections between groups and visually mapping those connections. Network analysis can inform us as to which groups play an important role in uniting groups across the movement, and which subnetworks are particularly strong or weak. Observing the change in networks over time helps map areas of movement growth and decline.

Data from four sources will be added to the existing networks of groups and campaigns/projects which are captured in the master database. The four data sources are 1), a review of new and broken network connections obtained from the website scraping, 2), a manual review of campaign & project data (see

section 5 above) identifying shared new and completed campaigns & projects, 3), network data collected from the Sunrise survey, and 4), event co-hosting data collected from Facebook events. Each of these four data sources will provide different, but complementary information to enable an extensive and detailed overview of network strength and changes over time.

Each year time will be spent carrying out
1. Automatic text analysis of scraped website text to identify new and broken network connections
2. Manual review of campaign data to identify shared new and completed campaigns/projects
3. Compilation of Sunrise survey dataset identifying network links between groups
4. Compilation of event co-hosting data
5. Combining all four data sources into the master database
6. Network visualisation
7. Analysis and presentation of results

6. Media analysis

Method

Media analysis will enable identification of how the movement is being portrayed across the Australian media landscape and which particular groups are receiving the most positive coverage.

This option involves three steps. The first step is acquiring the raw data. This can be achieved with an agreement with an organisation with access to obtain an annual datasheet on Australian media and various key terms. Alternatively, data can be acquired via Factiva, which is an online database of all full text media published in Australia. This media can be searched for any key terms, with full text articles downloadable in a form for subsequent automated text analysis.

Second, the raw data (if obtained via a datasheet) is converted into full text articles, through web scraping the online news reports. Third, full text articles are then analysed via automated software. Given that the movement monitor is interested in groups and advocacy impact, rather than coverage of climate change, this data could then be analysed to identify:

- Trigger events (events which capture much higher volumes of media coverage, either as a result of large movement activities or which generate large movement activity)
- Groups mentioned in media coverage,
- The number of mentions they receive and from which media outlets,
- Topics/concerns linked to the mentions and
- Sentiment (e.g., positive or negative) of the articles.

An example of what topic analysis of media coverage can look like is provided in the figure below. This identifies key words associated with media coverage on the Extinction Rebellion October 2019 Rebellion Week, School Strike 4 Climate Sept 2019 and Stop Adani 2017-2019.
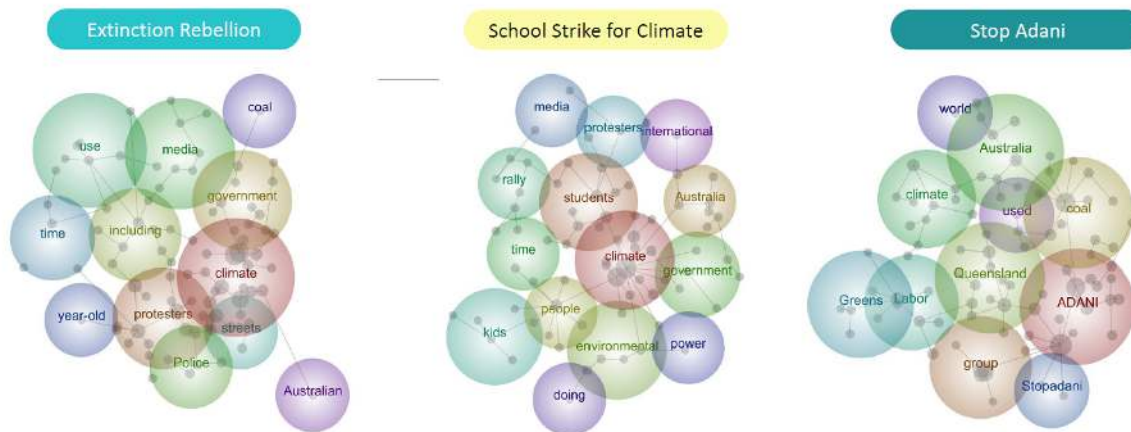
7. Organisational resources analysis

Method

The resources available to organisations provide an indicator about the capacity of the movement to effect change and its growth over time. Two specific organisational resources will be measured as part of this project: human and financial.

7.1.   Sunrise survey data: people and income

The Sunrise survey provides data on the annual income of organisations and the source of those funds. It also asks respondents how many staff and volunteers are engaged in their group activities.

This data can be supplemented by information collected from website scraping. Websites often identify how many staff work at the organisation, or whether the organisation is fully volunteer. Both datasets can be combined to give a detailed overview of the change in human resources across the movement over time.

7.2.   ACNC data (note timelag): people and income

The Australian Charities and Not-for-Profit Commission provides publicly available reports from all charitable organisations in Australia. This data includes each groups' financial income, assets and liabilities, as well as the number of staff and volunteers active in the group during the reporting period. While data is generally one year delayed, each year it can be downloaded, extracted and incorporated into the movement mapping dataset.

7.3.   Donation/fundraising data

Annual reports (see section 8 below) and other publicly available data on income provided to climate organisations can be searched and grant giving organisations (including Groundswell, Climate Action Network Australia, Australian Environmental Grantmakers Network and others engaging in climate related philanthropy) can be contacted for data. This information can be incorporated into the dataset developed in sections 7.2 and 7.3 above.

7.4   Diversity and inclusion

Sunrise survey data can be used to identify the diversity of staff and volunteers as identified by the organisations who respond to the survey. In addition, the database of groups will be reviewed to identify any new groups in diverse constituencies.

8.   Obtaining and analysing internal reports

Method

This component involves contacting groups or visiting websites to locate annual reports (and other relevant documentation). Once obtained, close reading or the annual reports will be undertaken to find indicators relevant to items 1-8 above.

9.   Interviews and focus groups with campaigners and stakeholders

Method

Individual and small group sessions will be held with people inside and outside the climate movement. Perspectives will be sought relating to a range of areas including movement challenges and gaps, training and resource needs, coordination and collaboration, diversity and inclusion, group structures, activity, strategy, tactics, and impact.

10. Skills audit

Method

Drawing on themes emerging from the Australian Climate Movement Survey, further work will be undertaken to flesh out a skills audit and training needs analysis. Activities to be determined but may include a survey (shorter than the Australian Climate Movement Survey and seeking responses from individuals rather than organisations), focus groups and interviews.

11. JEDI analysis

Drawing on themes emerging from the Australian Climate Movement Survey, further work will be undertaken to investigate the diversity of the climate movement and the experience of people with non-dominant identities. JEDI experts will be engaged and may undertake focus groups and other activities.

12. Follow up workshops

There is the potential to run follow up workshops and briefing sessions to further assist campaigners to make use of the movement map in terms of strategic and tactical directions.

Publications

The following list itemises academic peer reviewed papers that have been published using elements of this methodology.

- Gulliver, R. E., Banks, R., Fielding, K. S., & Louis, W. R. (2023). The Criminalization of Climate Change Protest. *Contention*, *11*(1), 24-54.
- Gulliver, R. E., Vachette, A., & Boddington, S. (2023). How Australian environmental non-governmental organisations frame and enact climate justice. *npj Climate Action*, *2*(1), 18.
- Gulliver, R. (2022). The Iconic 21st Century Activist" T-Shirt and Tote-Bag" Combination Is Hard to Miss These Days! How Fashion Manifests in Environmental Activism. *M/C Journal*, *25*(4).
- Gulliver, R., Wibisono, S., & Louis, W. R. (2022). Rising tides and dirty coal: The environmental movement in Oceania. In *The Routledge Handbook of Environmental Movements* (pp. 123-136). Routledge.
- Gulliver, R. E., Fielding, K. S., & Louis, W. R. (2021a). Assessing the mobilisation potential of environmental advocacy communication. *Journal of Environmental Psychology*, *74*(February), 101563. https://doi.org/10.1016/j.jenvp.2021.101563
- Gulliver, R. E., Fielding, K. S., & Louis, W. R. (2021b). *Civil resistance against climate change*. International Center on Nonviolent Conflict.
- Gulliver, R. E., Fielding, K. S., & Louis, W. R. (2020). The characteristics, activities and goals of environmental organisations engaged in advocacy within the Australian environmental movement. *Environmental Communication*, *14*(5), 614–627.
- Gulliver, R. E., Fielding, K. S., & Louis, W. R. (2019). Understanding the Outcomes of Climate Change Campaigns in the Australian Environmental Movement. *Case Studies in the Environment*.