**PRE-ANALYSIS PLAN**

**Realigning climate-forcing players?**

**Power Resources Mobilisation pathways in the Just Transition**

Rens Chazottes & Robin Huguenot-Noël (latest draft : 22 Mai 2025)

1. **Introduction: CFA stranding and its political implications**

Climate change and decarbonization imperatives have led governments across the world to adopt policies aimed at reducing the economic value of ‘climate-forcing assets’ (CFA), such as coal mines, fossil fuel-powered and vehicles, and aircraft reliant on traditional jet fuel.

Decarbonisation policies, however, rarely affect climate-forcing asset holders alone (Colgan, Green, and Hale, 2021).

More often than not, CFA ‘stranding’ comes at a cost for the *social fabric* of established communities, starting with the fragmentation of social structures at the local level to the contestation of democratic structures by anti-climate parties, as observed in the US, Argentine, or the Netherlands.

From a political economy perspective, this context raises two major questions:

1. Can asset-stranding policies be designed in a way that enhances (rather than undermines) local community ties?
2. To what extent can political intermediaries (such as trade unions) embedded in CFA structures initiate, cope with, and react to large-scale shifts in relative valuations?
3. **Existing contributions and research gap: The role of just transition policy support** 
   1. **The political backlash of ‘climate-forcing asset holders’**

Climate change and decarbonization policies have an obvious distributive impact. As scholars have shown (Colgan, Green, and Hale, 2021), climate politics across the globe can be essentially portrayed as a struggle between two groups: To the extent that they are negatively impacted by climate change, ‘climate vulnerable asset holders’ (CVA) generally benefit from climate policies. On the other hand, however, a group of 'climate-forcing asset holders’ (CFA) are, on balance, set to be negatively affected by decarbonization policies.

While decarbonization policies may rely on the support of CVAs, recent events suggest that climate change policies won’t be adopted without a certain degree of realignment of CFAs. As studies have shown, voters are strongly responsive to price signals from decarbonization policies, as showed in the case of energy prices in the Netherlands (Voeten, 2024) or the ban on polluting cars in Milan (Colontone et al., 2023). Policy resistance and political mobilization by CVAs also translated in anti-climate parties recently winning major national elections (e.g. US election in 2024, Argentine election in 2023, the Netherlands in 2023, etc.).

This context raises the question as to the conditions under which climate forcing asset holders, widely defined as those industries, workers, and citizens, holding climate forcing assets, **may be realigned to consent to climate policies, even when these come at short-term costs for their individual position in climate politics.**

* 1. **Realigning climate forcing players: How policy features affect different motives**

A key finding from the climate policy literature is that the design of climate policy may sway CFAs to vote against their immediate climate interests, in the hope of making other gains. In particular, a rich literature on Just Transition policies has shown that, when climate policies tend to receive stronger support from the fossil fuel communities when these are associated with compensatory programs. While a rich debate exists on the what ‘Just Transition’ policies actually include, two approaches can essentially be distinguished. These views notably distinguish themselves in their conception of (i) the *micro-drivers of* behavioural change (ii) the *function* played by policy interventions; and (iii) the desirable *features* of social policies associated to climate policies.

* + 1. ***Egotropic motives***

A dominant view in the scholarship focuses on the role of ***egotropic motivations*** in individual realignment. In this perspective, Just Transition interventions are essentially conceived as a barter between theoretically pre-established social groups: Decarbonization policies will create clearly identifiable ‘losers’. In this game-theoretical environment, social policies are viewed as ***compensation tools*** for the economic costs imposed on 'climate-forcing asset holders’.

* + 1. ***Sociotropic motives***

However, emerging research performed on the US context has also shown that individual realignment may also rest on motivations of a more sociotropic nature (Gazmarian, 2024). Decarbonisation may economically affect certain individual and sectors more than others, but its main social risks will reside in the wider social and political implications of CFA stranding. In this view, Just Transition interventions should be perceived as impacting local ecosystems. Social policies, in turn, should be viewed as capacitation tools that should contribute to revitalizing the social capital of most vulnerable places.

**I think here we are making two arguments: a) if the idea is to compensate, the compensation schemes can be broaden to communities as a whole and not workers, b) function played by the policy intervention: b1) compensating direct impact, b2) increase the likelihood of the policy to be implemented (reducing backlash), b3) compensating indirect impacts, b4) positive view of new development for the territory (capacitation strategy), c) there is a debate on the exact policy packages that is adequated.**

**I also miss a discussion on the differences in the micro-drivers of behavioural change between ego-tropic and sociotropic preferences.**

* + 1. **Research gap**

A first contribution of this project seeks to assess the *relative role* of egotropic vs. sociotropic preferences Just Transition interventions in the European context.

Yet, we also know too little today, about the extent to which these motivations may be mobilized by different actors to prompt a re-evaluation of the preferences of CFAs.

In this study, we hypothesise that while the content of just transition policies certainly affect climate policy consent by CFAs, this effect will be further mediated by the position expressed by representative bodies holding a sufficient level of credibility in the eyes of these actors.

1. **Realigning CFAs: Power Resources in the Jobs vs. Climate dilemma**
   1. **The Jobs vs. Climate dilemma**

Just Transition policy interventions do not happen in a vacuum. In the process of adoption, political actors can cue the publics through various policy frames with the aim to shape preferences, and mobilise, for example, sociotropic over egotropic inclinations.

* 1. **The role of trade unions**

Trade unions are a player at the crossroad of the just transition: Unions are often involved in decisions linked to closure, consolidation, or greening of climate forcing firms. Besides, unions often act as locally-embedded, political intermediaries, making them directly exposed to concerns linked to upholding the social capital of places affected by climate change.

Today, the literature is divided on the role of unions in climate change mitigation policies. Unions often fear job losses from pro-climate reforms (additional sources).However, evidence also shows that unions may consent to ambitious climate policies when these are accompanied by strong compensatory mechanisms (Kalt, 2021; Thomas & Doerflinger, 2020).

Of particular interest to this study is the fact that union’s position may also affect the position of CFA regarding the adoption of climate policies. As Bolet et al. (2023) have shown, the role of unions in the negotiation and acceptance of just transition policies was critical in the phasing out of Spain coal mines. In this study, the authors show that in contexts when union density is high, these can effectively shape workers and community preferences towards the acceptance of just transition packages.

As of today, however, the channels through which just transition packages may shape preferences remain largely undefined.

In this study, we posit that unions may dramatically change perception of climate policy interventions, yet that this effect may occur via three different pathways:

1. First, it cannot be excluded that unions act as a *responsive player*, comforting 'climate-forcing asset holders’ in their resistance to decarbonization policies.
2. Alternatively, unions may choose to act as *responsible player*, identifying the (social) conditions under which realignment of CFAs towards climate goals would be considered acceptable. In this case, we expect that these may act either by following either
   1. an ***insider-oriented logic*** (tailoring workers’ support via dedicated policies); or
   2. a ***public-seeking logic*** (targeting the whole local population via community investments).
   3. **A focus on affected workers**

To best distinguish between affected and non-affected populations, we target a representative sample of the main population of interest that is likely to backlash when decarbonization policies are implemented, namely: workers in CFA industries. With this focus on workers, we accordingly ask in this study:

**When do workers agree to forego their current employment status for the sake of climate mitigation objectives?**

1. **Hypotheses**

The first (baseline) aim of this project is to assess the publics relative preferences on Just Transition interventions appealing either to egotropic vs. sociotropic motivations.

Appeal to each of these cognitive inclinations will be assessed by testing individual preferences on trade-offs typically involved in various attributes conventionally featuring in Just Transition policies.

***RQ 1: Are just transition policy tools contributing to the individual realignment of CFA workers?***

* + 1. **Effect of policy design**

We first posit that:

* **H1.** When climate policies are coupled with Just Transition measures, support among exposed workers increases(*H0: When climate policies are coupled with Just Transition measures, support among exposed workers does not increase.)*

We further refine these expectations by considering the specific features of Just Transition interventions, drawing on the distinction between egotropic (workers-oriented) and sociotropic (community-oriented) motivations, as identified in recent literature.

* ***H1a.***The more strongly Just Transition measures support workers, the more likely affected workers are to support transition policies.
* ***H1b.*** The more strongly Just Transition measures support affected communities, the more likely affected workers are to support transition policies.
* ***H1c.*** The effect in H1b. is weaker than the effect in H1a.
  + 1. **Effect of union support**

The second, critical, aim of this project is to assess the role played by unions in mobilizing the sociotropic vs. egotropic inclinations of their members.

Above, we theorised a number of mechanisms whereby which unions may affect individual inclinations in ways which could contribute to collective realignment towards CMOs (see section 3): When they act as a *responsible player*, we argued, unions can positively change perception of climate policy interventions. In the latter case, responsibility may take the form of an ‘insider-oriented’ or a ‘public-seeking logic’.

As a baseline assumption, we posit that:

* **H2.** Endorsement of compensation policies by trade unions increases support for climate policy among workers in carbon-intensive sectors.  
  (H0: Union endorsement has no effect on worker support for the policy.)

We further refine this expectation by considering the **nature of union support** and its interaction with the **policy’s substantive features**:

* ***H2a.*** *Union endorsement of workers-oriented measures increases policy support among CFA workers.*
* ***H2b.*** *Union endorsements of community-oriented measures increases policy support among CFA workers.*
* ***H2c.*** The effect in H2b. is weaker than the effect in H2a
  + 1. **Heterogeneous effect linked to workers’ status**

Older workers, who face reduced reemployment prospects and are more vulnerable to job loss, may evaluate Just Transition interventions differently from younger cohorts. Accordingly, we posit that the effect of Just Transition policies may vary across different groups of CFA workers, particularly based on their **proximity to labour market exit**:

* **H3.** The effect of Just Transition policy features on support for climate transitions is stronger among older workers.  
  (H0: The effect of policy features does not vary by age.)

We further specify:

* **H3a.** Older workers show stronger support for workers-oriented measures (e.g. lump-sum payment, early retirement, job guarantees) compared to younger workers.
* **H3b.** In contrast, the effect of***community-oriented*** measures (e.g. infrastructure or public service improvements) on support is weaker among older workers compared to younger workers.

We finally posit that older workers, who may rely more heavily on trusted intermediaries when facing uncertainty, will are more responsive to union cues, particularly when those cues provide reassurance about compensation or job security. Accordingly, we expect

* **H4.** The effect of union endorsement on support for Just Transition policies is stronger among older workers.  
  (H0: The effect of union endorsement does not vary by age.)

1. **Empirical Strategy: A survey experiment assessing the ‘trade union effect’ in climate policy realignment of CFA**
   1. **Project focus**

To assess the validity of our claims, we field a survey experiment which would foresee a substantive decarbonization. For that, we focus on sectors likely to be significantly affected by decarbonization efforts: manufacturing, heavy industry (including chemicals and materials), the automobile, and the aviation sector.

Specifically, we envisage the hypothetical case of a major restructuring of national companies that would seek to reduce the company’s carbon footprint in ways that would asymmetrically impact local environments heavily relying on a CFA industry.

* 1. **Population, sampling strategy and case selection**

The role of unions in shaping preferences for just transition policies depends on (a) the *strength* of unions within specific sectors (as measured by the collective bargaining coverage), (b) the extent of their *institutional* embeddedness (that is their influence on policymaking), and (c) the characteristics of the targeted population.

To investigate these dimensions, we accordingly adapt our study population and sectoral focus accordingly. We conduct a comparative study of two countries—France and Germany—where unions play distinct roles in the bargaining process.

* 1. **Administration of the survey**

The survey will be administered online via the Qualtrics platform and distributed through unions representing workers in the targeted sectors. Where possible, we will also collaborate with the HR departments of major companies to disseminate the survey.

To encourage participation, the survey will include an incentive: respondents will be entered into a lottery to win a €100 voucher. This strategy enables us to reach a sample of engaged workers—those most likely to be early movers and potentially among those bearing the greatest costs in resisting decarbonization policies.

We aim to recruit a sample of 1,500 workers from industries likely to be impacted by the energy transition.

1. **Operationalisation**
   1. **The conjoint experiment**

Broadly speaking our research is concerned with the following question: Under which conditions are workers willing to accept a major personal loss (in the form of current job security) in exchange for a broader collective goal (climate policy)? In this conjoint experiment, we aim to assess which policy features of a just transition deal would lead workers in carbon-emitting industries to **consent to a climate policy package**, even at the cost of a likely negative impact on their current employment status.

* + 1. **Approach**

Respondents are presented with **4 pairs of hypothetical policy packages** (conjoint profiles) and asked to evaluate them.

* + 1. **Prompt**

**Prompt 1 - Conjoint**

To address global warming, the government has adopted a five-year plan to reduce emissions in high-polluting sectors by phasing out fossil fuels.

As part of this national effort, your region ~~(long reliant on coal and heavy industry)~~ has been selected for early implementation of this plan. Your company is directly affected, ~~a large employer in the area,~~ and expects to reduce its workforce by 30% over the 5 coming years.

To limit the social costs of this transition, the government has introduced a Just Transition package for affected workers and communities.

In the following task, you will be shown **four pairs of proposed Just Transition packages**. Each proposal includes a combination of features such as the level of financial support, job retraining opportunities, investment in local infrastructure, and more.

For each pair, please review the proposals carefully and select the one you find more acceptable. There are no right or wrong answers—we are interested in your preferences.

* + 1. **Attributes**
       1. Financial compensation

|  |  |  |
| --- | --- | --- |
| **Levels** | **Label** | **Source / real-world examples** |
| a) No additional compensation | *You receive only standard unemployment benefits.* | **Baseline condition** in many EU settings when no deal is struck  [2021 Sines (Portugal) fired power plant closure](https://www.sciencedirect.com/science/article/pii/S030142152500165X?utm_source=chatgpt.com): In 2021, Portugal closed its last two coal-fired power plants—Sines and Pego—as part of its commitment to climate change mitigation. Many of the workers in Sines primarily relied on standard unemployment benefits, with limited additional compensation or support mechanisms in place. |
| b) Lump sum (mandatory redundancy payment or negotiated severance payment) | You receive a one-time compensation equal to approximately three months of your previous salary. | |  | | --- | |  |   [Poland 2024 closure of coal and lignite-fired power plants and mines](https://balkangreenenergynews.com/polish-coal-industry-workers-to-receive-eur-300-million-amid-closures/?utm_source=chatgpt.com): collective labor agreements ***envisage severance payments***.  [Spain 2018 coal mines closure agreements](https://www.industriall-union.org/spanish-coal-unions-win-landmark-just-transition-deal?utm_source=chatgpt.com): Younger miners will receive a redundancy payment of €10,000, as well as 35 days’ pay for every year of service.  Miners with asbestosis will receive an additional payment of €26,000. (See also: <https://www.industriall-union.org/sites/default/files/uploads/documents/2018/SPAIN/spanish_plan_for_coal_eng_oct_2018.pdf>) |
| c) Monthly income bridge | |  | | --- | |  |   You receive a monthly allowance equal to around half of your previous salary, for up to 12 months. | [Poland 2024 closure of coal and lignite-fired power plants and mines](https://balkangreenenergynews.com/polish-coal-industry-workers-to-receive-eur-300-million-amid-closures/?utm_source=chatgpt.com): Employees are entitled to one-year severance payment, which they can choose instead of the severance payments foreseen in the applicable collective labor agreements. |

* + - 1. Job support

|  |
| --- |
|  |

|  |  |  |
| --- | --- | --- |
| **Levels** | **Label** | **Source / Real-world examples** |
| a) No additional support | |  | | --- | |  |   *You have access to the standard public employment services available in your country.* | |  | | --- | |  |   **Baseline condition most EU countries** where PES (Public Employment Services) are available to all citizens. |
| b) Personalized job support | |  | | --- | |  |   *You receive individualised support from a personal employment advisor or career coach.* | Spain's approach to the coal phase-out involved individualised support for workers as part of the so-called ‘**Just Transition Agreements’** |
| c) Job transition guarantee | *You receive a job guarantee in another section for a limited duration period, either in the public or private sector.* | [Transition companies](https://de.wikipedia.org/wiki/Transfergesellschaft?utm_source=chatgpt.com) in Germany |

* + - 1. (Re-)training support

|  |  |  |
| --- | --- | --- |
| **Levels** | **Label** | **Source / Real-world examples** |
| a) No training offered | You are not offered any (re-)training program as part of the transition. | |  | | --- | |  |   **Baseline condition** |
| b) Basic training (entry-level) | |  | | --- | |  |   You receive short-term training or apprenticeship to help you secure a job in low-skilled services (e.g., logistics, care work). | |  | | --- | |  |   TBD |
| c) Advanced training | You receive vocational or educational upskilling to help you shift to a higher-skilled profession (e.g., technician, engineer). | TBD |

* + - 1. Location of the new activity

|  |  |  |
| --- | --- | --- |
| **Levels** | **Label** | **Source / Real-world examples** |
| a) In your area: commute time under 30 minutes a day | |  | | --- | |  |   *Your new activity is nearby and requires no more than 30 minutes of commuting each day.* | |  | | --- | |  |   **Baseline condition** in most countries where relocation is voluntary and unsupported.  Blankenship et al. (2022) |
| b) In neighbouring area: commuting time beteen of 1 and 2 hours a day | |  | | --- | |  |   Your new activity is located in a neighbouring area within 1 to 2 hours commuting distance. | |  | | --- | |  |   TBD |
| c) Other region | Your new activity requires you to relocate to another region. | TBD |

* + - 1. Community investment

|  |  |  |
| --- | --- | --- |
| **Levels** | **Label** | **Source / Real-world examples** |
| a) No investment | |  | | --- | |  |   No additional government investment is targeting the local community. | |  | | --- | |  |   **Baseline condition for an un-managed transition.** |
| b) Green job-creating investment | |  | | --- | |  |   The government invests in renewable industries to attract or retrain workers. | |  | | --- | |  |   In [Asturias](https://www.transicionjusta.gob.es/content/dam/itj/files-1/Documents/Noticias/common/220707_Spain_JustTransition.pdf?utm_source=chatgpt.com), in the Suroccidente JTA action area, the Institute has allocated more than 77 million euro to support business projects, municipal infrastructures and three major environmental restoration works for mining operations. In addition to the environmental restoration of degraded areas in Buseiro, Cerredo and Tormaleo, with a total outlay of 82.4 million, 10 projects have been funded for sanitation, water supply and lighting infrastructures, energy efficiency measures in industrial estates and the construction of mini-warehouses to provide facilities for companies on a temporary basis. The installation of a plant for the drying and thermal treatment of wood as a source of renewable heat has also received funding. |
| c) Local infrastructure upgrading | The government funds improvements to local infrastructure, such as transport or broadband connectivity. | See e.g., EU Just Transition Fund projects in Poland and Eastern Germany (mobility, digital access). |
| d) Welfare services investment | Investment in local schools, hospitals, or childcare to improve public services. | [EU JTF investments in Ireland](../../../../../../Users/robin.huguenot-noel/Library/Mobile%20Documents/com~apple~CloudDocs/01%20Academic/00%20Milano/3%20Just%20Transition/0%20JTF/01_paper/Laois,%20Offaly,%20Longford%20and%20the%20Municipal%20Districts%20of%20Ballinasloe%20(Co%20Galway),%20Athy%20and%20Clane-Maynooth,%20(Co%20Kildare).) foresee financial support to “the delivery of education, skills, and training and the associated social care infrastructure, for the purposes of supporting participation in skills training and employment” |

* + - 1. Union position

|  |  |  |
| --- | --- | --- |
| **Levels** | **Label** | **Source / Real-world examples** |
| a) No union position | The trade union representing workers in your industry has not taken a position on the government’s plan. | |  | | --- | |  |   **Baseline condition** |
| b) Union opposes plan | |  | | --- | |  |   The trade union representing workers in your industry opposes the government’s transition plan. | |  | | --- | |  |   In 2015, [IG BCE](https://www.reuters.com/article/2015/04/25/us-germany-coal-protests-idUSKBN0NG0Q220150425/) organized a large demonstration in Berlin, with approximately 15,000 participants, protesting against the government's proposed climate protection levy, which aimed to reduce emissions from older coal-fired power plants. |
| c) Union supports plan | The trade union supports the transition plan. | TBD |

* 1. **The vignette experiment**

To test Hypotheses 2 and 3, we implement a vignette experiment. The design follows a factorial structure in which we vary both the policy mix and the stance of the labor union. Each scenario corresponds to an ideal type of union, as outlined in the table below.

**We devise the following scenario:**

To fight global warming, policymakers are considering policies to move away from fossil fuels and reducing sectors that have large emissions.

**Prompt 2 - Vignette**

To address global warming, the government has adopted a five-year plan to reduce emissions in high-polluting sectors by phasing out fossil fuels.

As part of this national effort, your region (long reliant on coal and heavy industry) has been selected for early implementation of this plan. Your company, a large employer in the area, expects to reduce its workforce by 30% over the coming years.

To limit the social costs of this transition, the government has proposed to introduce a Just Transition package. **FACTOR 1**

**FACTOR 2**

**FACTOR 1 (policy design):**

* Level 1 – Workers-oriented support: While the plan is still under development, it is expected to include some form of direct financial compensation and job guarantees for affected workers.
* Level 2 -Community-oriented support: While the plan is still under development, it is expected to include some form of public investment in local infrastructure, schools, and healthcare services.

**FACTOR 2 (Union support) will take the following levels:**

* Level 1 – Union opposition: ‘The trade union representing workers in your industry has opposed the Just Transition package.’
* Level 2 – Union support: ‘The trade union representing workers in your industry has endorsed the Just Transition package.’

1. **Measurement strategy**

For the conjoint experiment we use two main dependent variable as advised by Druckman and Green (2021):

* **Main outcome** – a dummy indicating the preferred policy
* (*secondary outcome for robustness check)* Respondents are asked to determine how strongly they feel about their preference from 1-3 similarly to Blankenship et al. (2022).

For the vignette experiment, we use the following dependent variables

* **Main outcome -** *How much do you support such a policy?* 0 = Strongly oppose, 10 = Strongly support
* **Mechanism -** To what extent does the union’s position increase your trust in the fairness of this policy? 0 = Strongly oppose, 10 = Strongly support
* **Open-ended follow up** *- In your own words, why does the union’s position influence—or not influence—your view of this policy?* Optional text entry
* **Impact on unions’ credibility -** To what extent does the union’s position make you more or less likely to see unions as effective actors in shaping climate policy? 0 = Strongly oppose, 10 = Strongly support
* **Impact on unions’ action -** How likely would you be to attend a union meeting about this transition plan?0 = Strongly oppose, 10 = Strongly support
  1. **Statistical analysis**

To test Hypothesis 1, we use insights from the conjoint experiment. We estimate the Average Marginal Component Effect (AMCE) by calculating the average effect of an attribute, averaged over the joint distribution of the remaining attributes (Hainmueller, Hopkins, and Yamamoto 2014). We cluster standard errors at the respondent level, since each subject makes multiple comparisons across which residuals are likely to be correlated. We will focus the analysis on the Free Retraining Program and Worker Support attributes.

To test Hypothesis 2, we will use both the vignette and the conjoint experiment. For the vignette, the main estimand is the Average Treatment Effect (ATE) of the Community Investment condition on support for climate policy. We estimate this quantity by (i) calculating the difference in means between the D1b and D1a groups, (ii) employing a bivariate Ordinary Least Squares (OLS) regression, and (iii) employing a multivariate OLS regression that controls for age, sex, race, education, income, and partisan identification, following the approach of Gazmararian (2024). For the conjoint, we will use the same test as in Hypothesis 1, focusing on the Community Investment attribute.

To test Hypothesis 3, we will again use both the vignette and the conjoint experiment. For the vignette, the main estimand is the Average Treatment Effect (ATE) of the Union condition on support for climate policy. We estimate this quantity by (i) calculating the difference in means between the D2b and D2a groups, (ii) employing a bivariate Ordinary Least Squares (OLS) regression, and (iii) employing a multivariate OLS regression that controls for age, sex, race, education, income, and partisan identification, again following Gazmararian (2024). For the conjoint, we will use the same test as in Hypothesis 1, focusing on the Union attribute.

* 1. **Power**

For the conjoint experiment, assuming an effect size of 0.03, 1,500 respondents, four tasks per respondent, and a maximum of three levels per attribute, we expect to achieve 80% power. With a larger effect size of 0.05—commonly used in power analyses on this topic (see Gazmararian 2024)—we reach 80% power with only 500 respondents. Power calculations were conducted using the following tool: <https://mblukac.shinyapps.io/conjoints-power-shiny/>.

For the vignette experiment, we benchmarked values using data from the survey experiment embedded in Gazmararian’s study. Assuming a treatment effect size of 0.1, a standard deviation of 0.5 for the outcome variable, and a power target of 80%, we estimate a required sample size of approximately 1,500 respondents (750 per group). Power calculations were conducted using the EGAP online power calculator: <https://egap.shinyapps.io/power-app/>.

1. **Conclusion / expected contribution**

Overall, the project may help us identify public support for stereotypical Just Transition pathways. We aim contribute to the literature on climate politics aiming at deepening our understanding of the acceptance of just transition policies. Our study echoes Colgan et al. (2021) proposition that decarbonization success depends on how and when interests mobilize. Unions may take an important role in realigning interests by actively reducing the relative power of climate-forcing assets vis-a-vis climate vulnerable assets which may ultimately participate in a flipping mechanism where individual or communities’ assets shift from being dominated by climate forcing assets to climate neutral, or vulnerable assets. We bring empirical evidence and shade lights to show how unions may enable or hinder such processes.

At this stage, we could – for example, consider whether empirical evidence would support an analytical distinction between:

* **An individual compensation path**
* **A group-securisation path**
* **A collective capacitation path**

Our findings should further help us engage with the rich Just Transition literature on discussions linked to 1) desirable policy mix to facilitate the re-alignment of CFAs; 2) cognitive orientations at play in individual decision-making on Just Transition policies; 3) political drivers of / mechanisms of power resource mobilization in shaping individual realignment.

1. **References**

Birch, Sarah. “Political Polarization and Environmental Attitudes: A Cross-National Analysis.” Environmental Politics 29, no. 4 (June 6, 2020): 697–718. <https://doi.org/10.1080/09644016.2019.1673997>.

Guber, Deborah Lynn. “A Cooling Climate for Change? Party Polarization and the Politics of Global Warming.” American Behavioral Scientist 57, no. 1 (January 1, 2013): 93–115. https://doi.org/10.1177/0002764212463361.

Kono, Daniel Yuichi. “Compensating for the Climate: Unemployment Insurance and Climate Change Votes.” Political Studies 68, no. 1 (February 1, 2020): 167–86. <https://doi.org/10.1177/0032321719836066>.

Maestre-Andrés, Sara, Stefan Drews, and Jeroen van den Bergh. “Perceived Fairness and Public Acceptability of Carbon Pricing: A Review of the Literature.” Climate Policy 19, no. 9 (October 21, 2019): 1186–1204. <https://doi.org/10.1080/14693062.2019.1639490>.

Vona, Francesco. “Job Losses and Political Acceptability of Climate Policies: Why the ‘Job-Killing’ Argument Is so Persistent and How to Overturn It.” Climate Policy 19, no. 4 (April 21, 2019): 524–32. <https://doi.org/10.1080/14693062.2018.1532871>.

**References**

Baute, Sharon. “The Distributive Politics of the Green Transition: A Conjoint Experiment on EU Climate Change Mitigation Policy.” Journal of European Public Policy 0, no. 0 (n.d.): 1–29. <https://doi.org/10.1080/13501763.2024.2304609>.

Beiser-McGrath, Liam F., and Thomas Bernauer. “How Do Pocketbook and Distributional Concerns Affect Citizens’ Preferences for Carbon Taxation?” The Journal of Politics 86, no. 2 (April 2024): 551–64. <https://doi.org/10.1086/727594>.

Bolet, Diane, Fergus Green, and Mikel González-Eguino. ‘How to Get Coal Country to Vote for Climate Policy: The Effect of a “Just Transition Agreement” on Spanish Election Results’. American Political Science Review, 4 December 2023, 1–16. <https://doi.org/10.1017/S0003055423001235>.

Colantone, Italo, Livio Di Lonardo, Yotam Margalit, and Marco Percoco. ‘The Political Consequences of Green Policies: Evidence from Italy’. American Political Science Review 118, no. 1 (February 2024): 108–26. <https://doi.org/10.1017/S0003055423000308>.

Gazmararian, Alexander F. “Fossil Fuel Communities Support Climate Policy Coupled with Just Transition Assistance.” Energy Policy 184 (January 1, 2024): 113880. <https://doi.org/10.1016/j.enpol.2023.113880>.

Henriks, Sofia, Niklas Harring, and Nils Droste. “Voters Do Not Punish Their Government for Climate Policies under Favorable Conditions.” Environmental Politics 0, no. 0 (n.d.): 1–24. <https://doi.org/10.1080/09644016.2024.2373606>.

Schaffer, Lena Maria. “Who’s Afraid of More Ambitious Climate Policy? How Distributional Implications Shape Policy Support and Compensatory Preferences.” Environmental Politics 33, no. 4 (June 6, 2024): 567–90. <https://doi.org/10.1080/09644016.2023.2247818>.

Srivastav, Sugandha, and Ryan Rafaty. “Political Strategies to Overcome Climate Policy Obstructionism.” Perspectives on Politics 21, no. 2 (June 2023): 640–50. <https://doi.org/10.1017/S1537592722002080>.

Voeten, Erik. ‘The Energy Transition and Support for the Radical Right: Evidence from the Netherlands’. Comparative Political Studies, 11 March 2024, 00104140241237468. <https://doi.org/10.1177/00104140241237468>.

Vormedal, Irja, and Jonas Meckling. “How Foes Become Allies: The Shifting Role of Business in Climate Politics.” Policy Sciences 57, no. 1 (March 1, 2024): 101–24. <https://doi.org/10.1007/s11077-023-09517-2>.

**References on unions**

Kalt, T. (2021). Jobs vs. climate justice? Contentious narratives of labor and climate movements in the coal transition in Germany. Environmental Politics, 30(7), 1135-1154.

Thomas, A., & Doerflinger, N. (2020). Trade union strategies on climate change mitigation: Between opposition, hedging and support. European Journal of Industrial Relations, 26(4), 383399.

Thomas, Adrien. “Framing the Just Transition: How International Trade Unions Engage with UN Climate Negotiations.” Global Environmental Change 70 (September 1, 2021): 102347. <https://doi.org/10.1016/j.gloenvcha.2021.102347>.

Stevis, Dimitris, and Romain Felli. “Global Labour Unions and Just Transition to a Green Economy.” International Environmental Agreements: Politics, Law and Economics 15, no. 1 (March 1, 2015): 29–43. <https://doi.org/10.1007/s10784-014-9266-1>.

Jordhus-Lier, David, Judith Marguerite Henriksson, Camilla Houeland, Genver Quirino, and Ingrid Andrea Holland. “Anchoring a Just Transition: The Ambivalent Roles of Norwegian Trade Unions.” Energy Research & Social Science 114 (August 1, 2024): 103619. <https://doi.org/10.1016/j.erss.2024.103619>.

Normann, Håkon E., and Silje M. Tellmann. “Trade Unions’ Interpretation of a Just Transition in a Fossil Fuel Economy.” Environmental Innovation and Societal Transitions 40 (September 1, 2021): 421–34. <https://doi.org/10.1016/j.eist.2021.09.007>.

Meadowcroft, James, and Daniel Rosenbloom. “Governing the Net-Zero Transition: Strategy, Policy, and Politics.” Proceedings of the National Academy of Sciences 120, no. 47 (November 21, 2023): e2207727120. <https://doi.org/10.1073/pnas.2207727120>.