Understanding the Effects of Green Industrial Policies on Labor Markets Outlooks*

Shihan Xie † Victoria Wenxin Xie ‡ Xu Zhang §

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Abstract

Green industrial policies, such as the Inflation Reduction Act (IRA), are increasingly employed to decarbonize the economy while revitalizing local labor markets. Using a novel survey design with information-treatment-based randomized controlled trials (RCTs), we study how place-based IRA provisions, particularly the Energy Community Tax Credit Bonus, influence workers' labor market expectations and behaviors. Our RCT exposes participants to different layers of information about national and place-based components of the IRA. We find that localized policy information significantly improves labor market outlooks, leading to higher expected earnings growth, stronger job retention intentions, and increased job-search activity among unemployed workers. However, uncertainty surrounding policy eligibility and policy durability dampens these effects. Our results highlight how spatial policy design and policy stability influence worker expectations and behaviors, providing insights into belief formation in the context of climate and industrial policy effectiveness.

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†Department of Economics, University of Illinois Urbana-Champaign. Email: shihanx@illinois.edu
‡Department of Economics, Santa Clara University. Email:wxie@scu.edu
§Bank of Canada. Email: xzhang@bank-banque-canada.ca

1 Introduction

Green industrial policies, designed to achieve multiple policy goals, have gained prominence in recent decades. As the largest climate investment in U.S. history, the Inflation Reduction Act (IRA) allocates substantial clean energy subsidies to reduce carbon emissions while stimulating local labor markets and regional economic growth. Its ambitious scope reflects a significant federal commitment to accelerating the clean energy transition. However, divergent beliefs about climate change and uncertainties in policy implementation may create gaps between policy targets and household perceptions. These discrepancies, in turn, could pose economic and political barriers to the effective execution and long-term durability of climate policies. In this paper, we combine a new large-scale survey of households with a range of randomized information treatments to study how green industrial policies shape workers' subjective labor market expectations and subsequent behaviors.

A growing literature examining the effects of place-based using observational data, provide estimates of the sectoral, regional, and spillover effects of place-based subsidies and local multipliers (Busso, Gregory and Kline, 2013; Criscuolo, Martin, Overman and Van Reenen, 2019; Siegloch, Wehrhöfer and Etzel, 2025; Kline and Moretti, 2014; Slattery and Zidar, 2020). However, little is known about how place-based green subsidies affect labor market beliefs, both for workers in directly treated regions and those in nearby regions. This is a critical limitation, as worker beliefs shape political support for climate policy and influence welfare implications in spatial equilibrium (Fan, Hong and Parro, 2023). We address this gap by leveraging an experimental design based on the place-based component of the IRA, the "Energy Community Bonus Credit", which allows us to elicit worker beliefs directly.

This paper highlights several underexplored dimensions of place-based policies. First, our approach allows us to examine policy uncertainty, which is particularly pronounced in recent green industrial policies like the IRA compared to earlier place-based initiatives, such as urban Empowerment Zones or the Tennessee Valley Authority. Given the increasing role of political polarization in affecting policy durability, assessing how uncertainty affects place-based policy design is crucial. Second, while an emergent literature explores information frictions in quantitative spatial equilibrium models — primarily taking a revealed preference approach (Fan et al., 2023; Porcher, Morales and Fujiwara, 2024) — our experimental design enables direct causal inference on how workers form beliefs around spatial policies. Third, the implementation of optimal spatial policy is fraught with political complexities, prompting policymakers to increasingly rely on second-best policy tools. In this context, understanding how workers perceive green industrial policies is therefore essential for designing practical policy tools that are politically feasible with broader public support.

To estimate the causal effects of different layers of green industrial policies, such as those in the IRA, we design multiple surveys to elicit subjective labor market perceptions. Given the labor market challenges posed by the energy transition – particularly for communities historically reliant on fossil fuel industries (Hanson, 2023) – an interesting feature of the IRA is its place-based approach,[1] which aims to stimulate job creation and economic growth in the regions most affected by the transition. Our experimental design leverages these realistic institutional features and provides some of the first evidence of how such policies impact workers in vulnerable communities. A key methodological innovation is our use of *place-based surveys* with randomized information treatments, allowing us to assess how policy design variations in geographic scope and policy uncertainty shape worker beliefs.

We collect our survey sample through two primary survey platforms, *Qualtrics* and *Prolific*.[2] The experimental design employs multi-layered information treatments. Our surveys are *"place-based"*, in the sense that treatment design is based on whether respondents are located in Energy Community eligible areas. Specifically, we introduce four information features: (1) a national information treatment providing general IRA policies; (2) a place-based treatment giving localized information to respondents in eligible energy communities; (3) a policy uncertainty treatment highlighting potential political and regulatory risks; and (4) a spillover treatment offering information about nearby Energy Community-eligible areas. Our surveys assess respondents' responses to these IRA-related information treatments, along with their general perception of opportunities and barriers in the energy transition. To estimate the average treatment effects, we regress the revisions in individual labor market expectations on dummies of treatment assignments. Our empirical framework is parsimonious, controlling for potential confounding factors such as individual demographics, location, and survey platform types.

There are three main findings. First, our survey results illustrate significant differences between the national implementation of IRA versus its place-based provisions in terms of their impacts on subjective labor market expectations. We show that the national provisions of the IRA do significantly impact individual expectations of aggregate outcomes at the city level, such as own city wage growth, auto-industry earning growth, and inflation. In contrast, the IRA's place-based provisions significantly affect the labor market expectations of respondents in eligible areas. In particular, information about the "energy community bonus credit", leads to 0.7 and 0.8 percentage points increases in expected city-level and auto industry earnings growth. Further analysis shows that this positive adjustment may be driven by workers' expected improvements in their outside options within the local labor market. We find no evidence of spillover effects by

[1] Specifically, the Energy Community Tax Credit Bonus provides an additional 10% (for production tax credits) or 10% (for investment tax credits) for projects, facilities, and technologies located in designated energy communities.

[2] Qualtrics allows us to conduct precise geographic targeting at the MSA level. For Prolific, we use a custom screening algorithm to obtain a balanced sample between eligible versus non-eligible areas.

these place-based information provisions on labor market expectations of respondents residing in non-eligible areas.

We use a follow-up study to evaluate how receiving information about the IRA shapes individuals' expectations regarding their own labor market outcomes and behaviors. The follow-up surveys reveal improved awareness of the IRA across all treatment groups, effectively ruling out potential experimental demand effects. We find that both the national and place-based treatments in eligible areas lead to modestly improved wage growth expectations. Notably, participants exposed to the place-based information treatment significantly increased their expectations of job stability, reporting an increased likelihood of remaining in their current positions. Consistent with these positive labor market expectations, employed participants who received place-based information treatment report reduced job-search activities, while unemployed respondents in eligible areas significantly intensify their job-search efforts.

Second, we highlight the role of policy uncertainty, particularly related to eligibility criteria for energy community tax credits and policy durability influenced by political cycles. We find that uncertainty surrounding eligibility criteria attenuates positive labor market expectations among place-based treatment groups.[3] Furthermore, our analysis reveals that subjective labor market expectations vary with participants' views on political stability, particularly expectations about a potential Republican electoral victory. Respondents who saw a Republican victory as highly probable (above 75%) showed no significant responses in expectations in all treatment groups, highlighting the critical role of policy stability in shaping labor market perceptions.

Finally, our survey results yield insights about the support for climate policy in addition to our core focus on subjective labor market expectations. We observe increases in the support for climate policy when giving place-based information treatment, whereas national-level provisions of the IRA show little impact on policy support. This is in line with our earlier findings on positive adjustments in labor market expectations to place-based policies.

Previous research has examined the labor market impacts of coal's decline (Colmer, Krause, Lyubich and Voorheis, 2024; Curtis, O'Kane and Park, 2024) and the economic impacts of place-based policies using observational data (Busso et al., 2013; Criscuolo et al., 2019; Siegloch et al., 2025; Kline and Moretti, 2014; Slattery and Zidar, 2020; Moretti, 2010). Using the event study approach, Bauer, Offner and Rudebusch (2024) find that the financial market responses to the IRA were economically significant. However, there is a notable gap regarding the impacts on labor market perceptions, particularly in the context of place-based green industrial policies. To our knowledge, this is the first paper to examine changes in subjective labor market expectations.

Many studies employing dynamic spatial models to analyze the aggregate effects of trade

[3] A part of this eligibility uncertainty lies in the dual criteria for energy communities: the fossil fuel employment requirement and the local unemployment rate requirement.

shocks, migration, and climate change typically assume perfect foresight (Balboni, 2025; Cruz and Rossi-Hansberg, 2024; Desmet, Kopp, Kulp, Nagy, Oppenheimer, Rossi-Hansberg and Strauss, 2018; Jia, Ma and Xie, 2022; Rudik, Lyn, Tan and Ortiz-Bobea, 2022). However, recent research highlights how information frictions in expectation formation can significantly influence aggregate welfare (Fan et al., 2023; Porcher et al., 2024). While prior work (Bombardini, Li and Trebbi, 2023; Dickstein and Morales, 2018; Fan et al., 2023) has used a revealed preferences approach to infer agents' beliefs from their decisions, we adopt an information-treatment-based research design to establish the direct causal effects of green industrial policies on belief formation. Our place-based survey designs uncover key differences between the national implementation and localized components of the IRA – specifically, positive labor market expectation responses arise only when information about place-based policy provisions is presented.

The behavioral macroeconomics literature increasingly emphasizes the need to understand subjective labor market expectations and risk perceptions (Mueller, Spinnewijn and Topa, 2021; Hvidberg, Kreiner and Stantcheva, 2023; Caplin, Gregory, Lee, Leth-Petersen and Sæverud, 2023; Jain, Kostyshyna and Zhang, forthcoming; Jäger, Roth, Roussille and Schoefer, 2024). Meanwhile, a growing body of research employs survey methods to examine household beliefs about climate change risks (Bakkensen and Barrage, 2022; Mulder, 2021) and general perceptions of environmental policies (Dechezleprêtre, Fabre, Kruse, Planterose, Chico and Stantcheva, 2022). However, there remains limited evidence on how workers form labor market expectations in response to policy changes. Since beliefs about wages and job transition risks shape job search behavior, labor market participation, and labor supply decisions, understanding these expectations is crucial. Our study advances this literature by leveraging a novel place-based sampling strategy and survey design to directly assess the impact of green industrial policies on workers' labor market beliefs.

Finally, this paper contributes to the literature on individuals' beliefs and misconceptions about public goods provision (Acemoglu, Cheema, Khwaja and Robinson, 2020). It also connects to research on the role of partisanship in shaping economic beliefs and expectations. For instance, Binder, Kamdar and Ryngaert (2024) show that Republicans and Democrats responded differently to macroeconomic announcements during the COVID period. Our findings highlight how uncertainty surrounding policy eligibility and durability can create a disconnect between policy intentions and their actual effects on household perceptions, and dampen the effectiveness of place-based policies on positive labor market belief formation.

The paper is organized as follows. Section 2 presents background information on the IRA and our sampling strategies. Section 3 discusses the survey design and data. Section 4 presents the main results. Section 5 explores the heterogeneous treatment effects. Finally, Section 6 concludes. The appendix provides further details.

2 Background and Sample

In this section, we provide institutional details about the Inflation Reduction Act including the energy community tax credit bonus provisions, and how it informs our survey design and sampling choices. Existing surveys, such as those conducted by the US Census, rarely capture labor market beliefs related to climate change and environmental policy. To overcome these data challenges and to provide causal interpretation, we design and conduct *place-based surveys* to gauge workers' labor market outlooks.

2.1 The Inflation Reduction Act

The Inflation Reduction Act of 2022 is a landmark U.S. federal law aimed at reducing the budget deficit, lowering prescription drug prices, and accelerating the transition to clean energy. Passed by the 117th Congress and signed into law by President Joe Biden on August 16, 2022, the IRA is widely regarded as the most ambitious climate policy in U.S. history.

Over the next decade, the IRA will channel substantial financial support into clean technologies and industries through new tax credits and direct government investments. The IRA is a green industrial policy as it seeks to mitigate the distributional effects of the clean energy transition in fossil fuel-intensive regions. The goal is not only to promote high-quality jobs in clean energy but also to address long-standing environmental injustices in marginalized communities. Clean energy jobs typically offer higher wages and safer conditions than traditional fossil fuel industries while also reducing local air pollution sources, particularly for low-income and minority populations.

However, the transition to a clean energy economy presents labor market challenges, including job displacement in traditional energy sectors. Lower-income and less-educated workers face disproportionate risks, underscoring the need for comprehensive retraining programs within the IRA to support skill adaptation for the emerging green economy.

A key component of the IRA is its *place-based* components – targeted policies aimed at improving the economic prospects of specific regions. These policies focus on job creation and wage growth, particularly in communities historically reliant on fossil fuel industries (Neumark and Simpson, 2015). Among them, the *Energy Community Tax Credit Bonus* applies a bonus of up to 10% (for production tax credits) or 10 percentage points (for investment tax credits) for projects, facilities, and technologies located in energy communities.

We focus on a primary qualifying category for energy communities, referred to as eligible areas throughout this paper, as illustrated by Figure 1. These include metropolitan statistical areas (MSAs) or non-MSAs that meet both of the following criteria: (1) at any time after 2009,

they have met the fossil fuel employment threshold—either at least 0.17% direct employment or 25% or more of local tax revenues derived from the extraction, processing, transport, or storage of coal, oil, or natural gas; and (2) they have had an unemployment rate at or above the national average for the previous year.[4] Areas that did not meet these criteria in June 2024 are referred to as *non-eligible areas* hereafter.

Energy community designations fluctuate annually. As of June 7, 2024, MSAs and non-MSAs that met the 2023 unemployment rate requirement qualify as energy communities and will retain this status until the 2025 Annual Statistical Area Category and Coal Closure Category Update, which is expected to incorporate 2024 unemployment data in May 2025. Additionally, some MSAs and non-MSAs meet the fossil fuel employment threshold but do not currently qualify due to unemployment rate criteria. These areas could gain energy community status in the future if they meet both requirements.

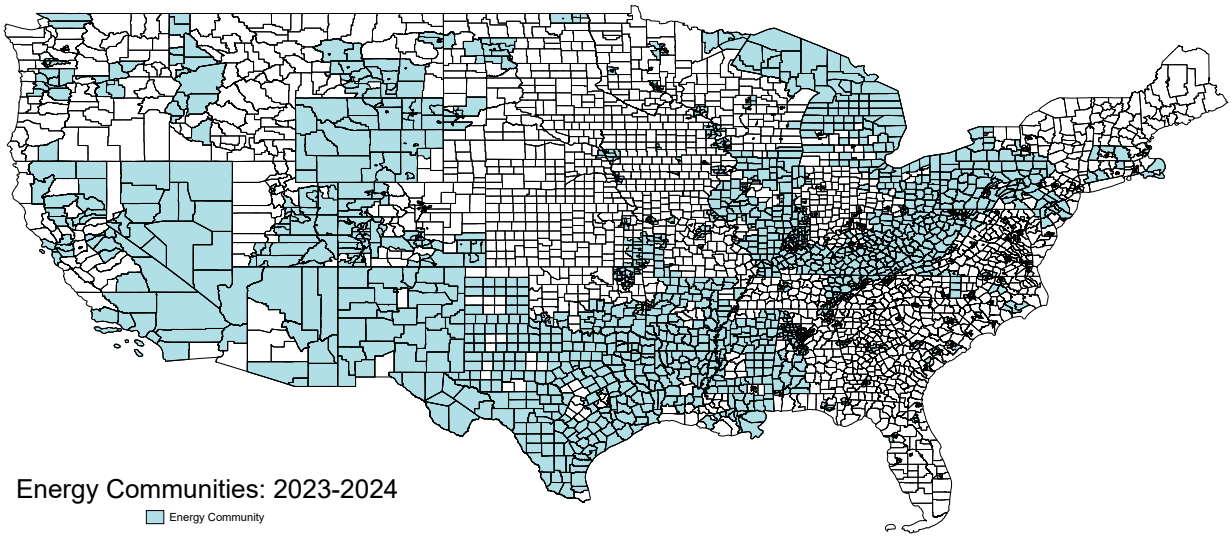


Figure 1: ENERGY COMMUNITIES: U.S. DEPARTMENT OF ENERGY

This map shows all energy communities qualifying for the IRA energy community tax credit bonus from 2023 to 2024, according to U.S. Department of Energy (2023–2024)

2.2 Sampling Strategy

We collect our sample through two main survey platforms, *Prolific* and *Qualtrics*, each offering distinct advantages. Given that the IRA is a place-based policy, our survey is also designed to

[4] Other categories include “brownfield sites", as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, and census tracts (or directly adjoining ones) in which a coal mine has closed after 1999 or in which a coal-fired electric generating unit has been retired after 2002.

be place-based, targeting respondents in both eligible and non-eligible areas. The treatment information provided to participants is based on their location.

Prolific Prolific offers the advantage of respondent re-contact and broad U.S. coverage, but it does not allow for direct MSA-level targeting. To address this limitation, we implement a custom screening algorithm to achieve a balanced sample between eligible and non-eligible areas. When participants first enter the survey, we collect self-reported location data, which we use to determine their area for eligibility. Respondents residing in MSAs already covered by Qualtrics are screened out, while the rest proceed with the survey. Given the disproportionately large number of respondents from non-eligible areas, we impose a quota and stop recruitment once the target is reached. All screened-out participants receive compensation for their time.

Qualtrics Qualtrics enables precise targeting of specific MSAs, allowing us to focus on eligible regions. Using Bureau of Labor Statistics data, we identify MSAs with significant employment in power generation and related manufacturing sectors. Our sample includes respondents from Chicago, IL; Pittsburgh, PA; Philadelphia, PA; Detroit, MI; Houston, TX; Portland, OR; New Orleans, LA; Las Vegas, NV; and Los Angeles, CA. The total size of the Qualtrics sample is approximately 5,000 respondents, equally sampled across these MSAs.

3 Survey Design and Data

This section outlines the design of our survey and the characteristics of our sample. Our place-based survey employs randomized information treatments to assess how exposure to information about the IRA shapes job search behaviors and labor supply decisions. To ensure causal identification, we apply the latest survey-based techniques to introduce exogenous variations in information treatment (Haaland, Roth and Wohlfart, 2023).

3.1 The Survey Structure

The survey consists of five main sections designed to capture respondents' general views toward climate change and the energy transition, their labor market expectations, and, most importantly, their responses to IRA-related informational treatment. The full questionnaire is reported in Appendix B.

The survey begins by eliciting respondents' views on climate change and their political leanings. Next, we elicit respondents' labor market outlooks. It begins by identifying their current labor market status, including whether they are employed, and if not, whether they are actively

searching for jobs, or not currently in the labor force. The next part of this section examines expectations about labor market conditions at both the individual and national levels. All respondents are asked about their expectations for key economic indicators, such as income growth in the city and the auto sector in general. Employed individuals are asked about job security, career growth prospects, and anticipated changes in their current employment situation. Unemployed individuals report their outlook on job-finding probabilities and expected wages. Individuals who are currently out of the labor force report whether they plan to enter the workforce in the near future and whether they intend to pursue training or skill development.

Respondents then proceed to the information treatment stage. Before exposure to any information treatment, assess their existing knowledge and opinions regarding the IRA. They are then randomly assigned to either a control or treatment group, with assignment to treatment groups determined in part by whether they live in eligible areas, as detailed in Section 3.2. The control group receives no additional information, while treatment groups receive varying levels of information about national and place-based IRA policies. After the treatment, respondents provide their thoughts on the IRA's potential impact on their personal circumstances, their local economy, and the national economy. Additionally, employed respondents are asked whether they expect to observe any IRA-related changes in their workplace.

To measure the effect of the treatment, respondents then revisit the labor market outlook questions, with wording adjustments designed to mitigate experimenter demand effects. This pre- and post-treatment design allows us to assess how exposure to IRA-related information affects respondents' subjective assessments of labor market conditions.

After that, we gather information on respondents' industries and occupations, providing further context for their labor market perspectives. We then collect demographic details, including geographic location, income, education, age, and gender. To gauge potential shifts in attitudes after the information treatment, this section also includes a follow-up question on respondents' perceptions of climate change policies.

Design differences between Prolific and Qualtrics surveys We incorporate design features tailored to each survey platform to better capture the effects of IRA information on respondents' labor market actions. For Prolific respondents, we conduct a follow-up survey one week later to track behavioral responses over time. This follow-up asks how much time they have spent searching for jobs, whether they have sought information related to the clean energy transition, and whether they have specifically looked for renewable energy-related job openings. In particular, for employed respondents, we ask questions about their own labor market outlooks again to capture any delayed treatment effects.

For Qualtrics respondents, we designed additional post-treatment questions to understand

the potential mechanisms. This includes eliciting workers' willingness to increase commuting time (Monte, Redding and Rossi-Hansberg, 2018), expectations about outside options (Jäger et al., 2024), reasons to stay with current employer, and perceptions of employer responses to the IRA. Since re-contacting respondents in the Qualtrics sample is not feasible, we provide them with two clickable links – one leading to general job postings in their local area and another directing them to job postings specifically in the renewable energy sector.

3.2 Information Treatments

We designed a multi-layered information treatment based on the eligibility of respondents' locations for IRA tax credits. The first layer provides a *national treatment*, which presents information about general tax incentives under the IRA. This treatment is administered to all respondents assigned to a treatment group, regardless of whether their location has ever qualified for the local IRA tax credits.

> The Inflation Reduction Act (IRA), signed into law in August 2022, is the largest initiative ever undertaken in the U.S. to invest in clean energy and address climate change. The IRA offers significant tax incentives for production and investment in renewable energy projects.

Eligible areas For respondents residing in locations that have previously qualified for IRA tax credits, we introduce a second layer of *place-based policy* that provides localized information about specific tax credits available in their area.

> Your city has previously qualified for the "Energy Community Bonus" under the IRA due to its historical role in energy production. This bonus, designed to stimulate local clean energy jobs, offers an additional tax credit of up to 10% for production or investment in renewable energy projects.

Since IRA eligibility is determined by two thresholds – fossil fuel employment and local unemployment rate – eligibility status may fluctuate over time depending on the current local unemployment rate. To account for this, we introduce an additional treatment layer for eligible areas, informing respondents that future qualification depends on evolving local economic conditions. This *uncertainty* may influence perceptions of the policy's impact on the local economy.

> Qualification for this bonus credit changes over time depending on your local economic conditions. The next update will take place around May/June 2025.

Non-eligible areas For respondents in areas that have never met the fossil fuel employment threshold and, therefore, are ineligible for the local IRA tax credit, we introduce a modified second-layer treatment to assess potential *spillover effects*. While these areas do not receive local IRA benefits, they remain eligible for national tax incentives.

> Certain cities in the US have previously qualified for the "Energy Community Bonus" under the IRA due to their historical role in energy production. This bonus, designed to stimulate local clean energy jobs, offers an additional tax credit of up to 10% for production or investment in renewable energy projects.
> While your city has not yet qualified for the "Energy Community Bonus", it remains eligible for nationwide tax incentives for renewable energy projects under the IRA.

3.3 Descriptive Statistics

We collaborate with two platforms, *Prolific* and *Qualtrics*, to administer our survey instruments. The *Prolific* survey was conducted between September and October 2024, following the announcement of the new eligibility rule on June 6, 2024. This period coincided with major political events, including President Biden's resignation, Vice President Kamala Harris's succession, and the selection of vice-presidential candidates by both the Democratic and Republican parties. All *Prolific* respondents were re-contacted one week after completing the main survey, achieving a re-contact rate of 76%. The *Qualtrics* survey was conducted in two waves: the first in late October 2024, before the U.S. presidential election, and the second in December 2024, following the election. Table 1 summarizes the details of all experiments.

For Prolific respondents, treatment assignment varies based on whether they reside in an IRA-eligible area. Respondents in eligible areas are randomly assigned to one of three groups: a control group (T0) that receives no additional information, a national treatment group (T2) that receives information about general IRA policies, or a place-based policy treatment group (T3) that receives both national IRA policies and additional information on place-based incentives, specifically the *Energy Community Bonus Tax Credits*.

Prolific respondents in non-eligible areas are randomly assigned to one of three groups: a control group (T0), a national treatment group (T1), or a spillover treatment group (T5) that receives information about both national IRA policies and the Energy Community Bonus, explicitly noting that their city does not qualify for it.

For Qualtrics respondents, all participants are from IRA-eligible areas and are randomly assigned to one of three groups: a control group (T0), a place-based policy treatment group (T2) that receives both national and place-based IRA policy information, or a policy-based policy uncertainty treatment group (T4) that, in addition to receiving information about national

Table 1: OVERVIEW OF EXPERIMENTS

Experiment	Experiment 1 Eligible areas	Experiment 2 Non-eligible areas	Experiment 3 Followup of Experiment 1 & 2	Experiment 4	Experiment 5 Nine eligible MSAs
Platform	Prolific	Prolific	Prolific	Qualtrics	Qualtrics
Timeline	Sep - Oct 2024	Sep - Oct 2024	7 days after the main survey	Oct 2024 (pre-election)	Dec 2024 (post-election)
Sample	N=2,060	N=2,165	N=3,232	N=4,306	N=819
Treatment Groups	Control (T0), national (T2), national + place-based (T3)	Control (T0), national (T1), national + spillover (T5)	N/A	Control (T0), national + place-based (T3), national + place-based + uncertainty (T4)	
Main Outcomes	IRA awareness; expectations of inflation, city earnings growth, auto sector earnings growth, own wage growth; own wage growth uncertainty; probabilities of individual labor market outlook (stay, quit, laid off, job finding)				
Additional Outcomes			Hours spent on job search; search for information about clean energy transition; search for jobs in renewable energy sectors	Outside options; commuting time; employer response to the IRA; reasons to stay with current employer	

Note. This table provides an overview of all experiments.

and place-based policies, is also informed about the potential uncertainty surrounding future eligibility for IRA tax credits.

The median completion time of our survey is 10 minutes. We excluded 294 observations whose total survey completion time was less than 5 minutes or exceeded 40 minutes. Furthermore, we removed 306 observations that spent virtually no time (less than two seconds) on the screen showing the information treatments. This leaves us with a total of 9,350 observations for the main survey.

Table A.1 presents the demographic distribution across treatment groups within each sub-sample, demonstrating balance across key characteristics. The first sub-sample consists of respondents from non-eligible areas recruited through Prolific. This group is well-distributed across gender and racial categories, with approximately 58% identifying as female, 7% as Hispanic, 74% as White, 18% as Black, and 6% as Asian. The majority fall within the 30 - 45 age range, and more than half (55%) hold at least a bachelor's degree. Household income distribution is relatively even, with 37% earning below $50,000, 36% between $50,000 and $100,000, and 27% above $100,000. The second sub-sample, comprising Prolific respondents from eligible areas, exhibits similar demographic patterns, with a slightly higher representation of Hispanic respondents (16%) and a marginally lower share of female respondents (54%).

The third sub-sample, drawn from Qualtrics, consists exclusively of respondents from the nine MSAs in IRA-eligible areas. Compared to the Prolific samples, this group is older, with 42% above the age of 55. The proportion of respondents with a bachelor's degree (37%) is slightly lower, and household income distribution skews lower, with nearly half (49%) earning below $50,000 annually. The racial composition is comparable to that of the Prolific samples.

To ensure that observed differences in outcomes are driven by the treatment rather than pre-existing differences, respondents were randomly assigned to treatment groups within each sub-sample. Column (5) of Table A.1 reports the p-values of the balance tests, which confirms that the assignment is indeed random, as there are no systematic differences in demographic characteristics across treatment groups.

Table A.2 presents summary statistics for key pre-treatment outcome variables across treatment groups within each sub-sample. Across all sub-samples, respondents on average expect moderate city-level earnings growth over the next year, with mean expected earnings growth ranging between 2.06% and 2.51% across groups. Expectations about auto-sector earnings growth are slightly higher, with the mean ranging from 2.78% to 3.26%. Conditioning on working at the current job, employed individuals expect their own wage to increase on average by 5.46 - 5.87% over the next 12 months. Average inflation expectations center around 4.28% to 5.79%, with slightly higher values reported in the Qualtrics sub-sample. Support for climate policy is, on average, strong across groups, averaging around 70-74 on a 100-point scale.

Regarding job security, employed individuals report an average 72-76% probability of staying in their current job and a 5-7% probability of being laid off. For unemployed individuals, the perceived probability of finding a job within three and twelve months hovers around 36-44% and 60 - 63% across samples, respectively. For those that are currently out of the labor force, approximately 26-41% of respondents anticipate looking for a job within the next 12 months. Importantly, the p-values for most pre-treatment expectation variables suggest no significant differences across different groups, reinforcing the validity of our randomized design.

4 Main Results

In this section, we first outline the estimation strategy to identify average treatment effects and discuss the impacts of each treatment on aggregate labor market outcomes. We further explore how the IRA shapes individuals' perceptions of their personal labor market prospects and provide evidence on the effects of the information treatment on job search behaviors.

4.1 Estimating the Average Treatment Effects

To identify the causal effect of different IRA-related information treatments on subjective labor market outlooks, we estimate the following empirical specification,

$$Y_i^{\text{post}} - Y_i^{\text{pre}} = \beta_0 + \sum_{j=1}^{5} \beta_j \text{Treatment}_i^j + \eta \text{Eligible}_i + \psi \text{Prolific}_i + \Gamma X_i + \varepsilon_i, \tag{1}$$

where the outcome variable, $Y_i^{\text{post}} - Y_i^{\text{pre}}$, is the difference between posterior and prior labor market expectation measures for respondent i. The posterior measure Y_i^{post} is either from the immediate post-treatment survey or from the follow-up survey. Treatment_i^j is an indicator variable if individual i belongs to treatment group Tj, with the control group as the omitted category. β_j estimates the average treatment effect of information presented in Treatment^j on the revisions of Y relative to the average change in the control group. Eligible_i is a dummy variable equal to 1 if the individual lives in the area that is eligible for IRA tax bonus and equal to zero otherwise. Prolific_i is a dummy variable equal to 0 if the individual participants in the survey in the nine cities where we launch the Qualtrics survey and 1 otherwise. X_i encompasses a rich set of individual-level controls such as age, gender, education, race, ethnicity, and income categories. We employ Huber-robust estimates to systematically control for outliers (e.g., Coibion, Gorodnichenko and Weber 2022).

Our parameters of interest are β_j, which measure the causal effects of different IRA-related information treatments on subjective labor market beliefs and outlooks. β_j identifies the average

change in the expectations of the agents in the treatment group compared to the average change in the control group. Specifically, we allow for heterogeneities in the national treatment across non-eligible and eligible areas, and their effects are captured by β_1 and β_2, respectively. Moreover, β_3 measures the overall effects of the national and place-based treatment, while β_4 reflects the overall effects of the national and place-based but with uncertainty treatment. β_5 captures the overall effects of national and spillover effects.

To identify these effects, we make the following assumptions about the consistency of the treatment effect between different groups. First, we assume that the effects of the place-based treatments relative to the control group in eligible areas are consistent across survey platforms (Prolific and Qualtrics), ensuring that the effects of place-based treatment effects between these groups are captured by β_3. Second, we assume that the difference between control groups in prolific eligible and non-eligible areas captures the effect of eligibility, η, and that this effect is the same across treatment groups. Third, we assume that the difference between the control groups in Qualtrics eligible and prolific eligible areas captures the effect of using different survey platforms, ψ. When selecting cities for the Qualtrics survey, we restricted the sample to nine specific cities and excluded Prolific participants from these same cities. Therefore, ψ can also be interpreted as measuring the effect of the local treatment relative to the control group across these nine Qualtrics cities and other eligible areas that are not part of this selection. Including the Prolific indicator in the regression is crucial, as Prolific participation correlates with our treatment group assignment.

4.2 Aggregate outcomes

In this section, we present our findings on aggregate outcomes, focusing on four different aspects of the design and implementation of the IRA. We begin with labor market expectations toward the national implementation of the IRA and then examine the impacts of its place-based policy provisions (the “energy community bonus credit"). Next, we discuss the role of policy uncertainty and conclude this subsection with findings on expectations towards spillover effects.

National implementation of the IRA The top two estimates in each panel of Figure 2 illustrate the causal effects of providing information about the national implementation of the IRA on labor market perceptions in non-eligible areas and eligible areas. These estimates indicate that, compared to the control group, individuals exposed to information about the national provisions of the IRA do not have significantly different expectations across various dimensions, including their city’s earning growth, auto industry earning growth, inflation, or support for climate policy. Together, these results reveal a consistent pattern: information about the national treatment of

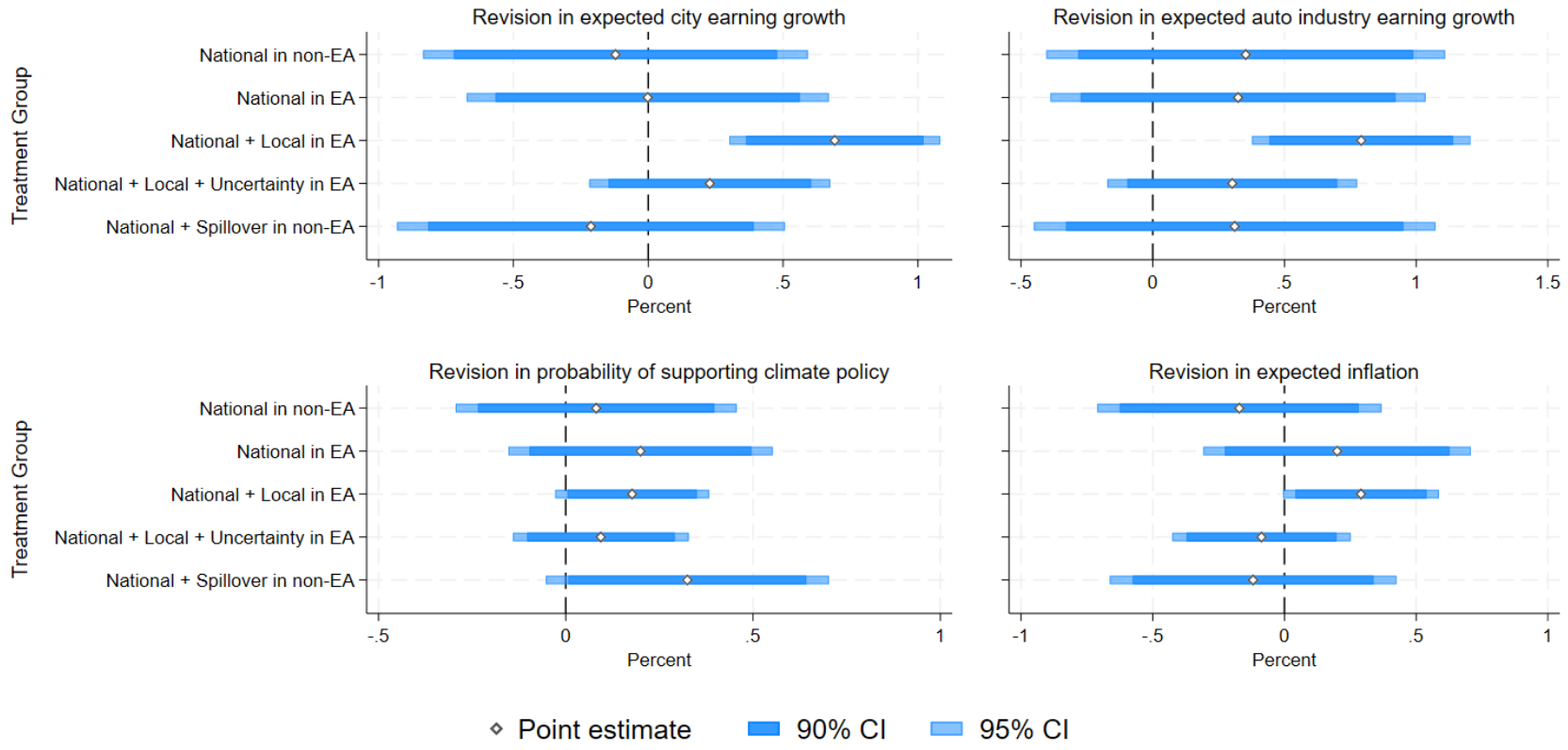


Figure 2: AVERAGE TREATMENT EFFECTS

Note. The figure plots the treatment coefficients along with the 90% and 95% confidence intervals using regression equation 1. The dependent variables are the expected 12-month-ahead city earnings growth, expected 12-month-ahead auto industry earnings growth, probability of supporting climate change policy, and expected 12-month inflation, respectively. Results are based on Huber-robust estimates.

the IRA does not lead to any meaningful adjustments – positive or negative – in aggregate labor market perceptions.

One potential interpretation is that the general provisions of the IRA may be perceived as too broad or distant to have a direct and discernible impact on beliefs about local labor markets. The IRA's general benefits are well known but do not explicitly show how they apply to the specific region. Workers may not see why this policy benefits them in their specific location.

Place-based provisions of the IRA Place-based policies are a widely used policy instrument to support regions that are economically lagging behind. The IRA includes strong incentives for employers to pay good wages and benefits. Our place-based survey designs allow us to contrast the impacts of the national component of the IRA on labor market perceptions versus the impacts of its place-based component. To examine this, we implement a second layer of information treatment, exploring the impacts of an important yet under-explored place-based provision of the IRA, "the energy community bonus credit", which we describe in detail in Section 2.

Our results show that in regions qualifying for the IRA's place-based credits, exposure to local information leads to modest but statistically significant increases in expected city-level and auto industry earnings growth - approximately 0.7 and 0.8 percentage points higher than in the control group. These effects are also more pronounced than those observed under the national treatment in both eligible and non-eligible areas.

To further understand the positive impact of place-based policies on city-level expected wage increases, we asked employed respondents about their perceptions of outside options in their cities (Jäger et al., 2024). Figure C.1 shows the effects of place-based policy on individuals' beliefs regarding future job opportunities across different industry-occupation combinations. Overall, respondents report positive, though statistically insignificant, responses, including opportunities within their current industry and occupation, as well as those involving different occupations or industries. These results suggest that the observed optimism about wage increases is likely driven by anticipated improvements in workers' outside options within the local labor market.

Policy uncertainty An important aspect of the place-based component of the IRA is that eligibility for energy community bonus credits may vary over time. This is due to the fact that the eligibility criteria are based on two key factors: fossil fuel employment levels and local unemployment rates, both of which can fluctuate. These two criteria introduces uncertainty about the longer-term availability of these local tax incentives, which are particularly relevant for firm investment, business expansion, and production planning. To capture how this type of policy uncertainty shapes aggregate expectations, our survey includes a treatment arm that explicitly highlights the possibility of changes in "energy community" eligibility. As shown

in the top row of Figure 2, respondents receiving this treatment do not update their labor market outlook as strongly as those who only learn about the immediate availability of the "energy community" credit. Specifically, while the place-based provision leads to a significant positive revision in expected city-level and auto-industry-level earnings, adding the uncertainty information dimension attenuates these effects. Consistent with this observation, Figure C.1 shows that adding policy uncertainty leads to overall negative evaluations of outside options, in contrast to the positive responses from the place-based policy treatment.

Spillover Effects Our design allows us to investigate whether regions *not* currently designated as "energy communities" nonetheless anticipate indirect benefits or harms from the IRA's local provisions in neighboring areas. For areas that fall outside the eligibility criteria, they may perceive that new energy-sector investments elsewhere can ripple outward – through demand for intermediate inputs, tighter labor markets, or related service expansions – to boost their own local wages and job opportunities. Conversely, some respondents may view the place-based extra tax credits as a redistribution of public finances, raising concerns about increased tax burdens without direct local benefits. However, we did not find any significant effects on household beliefs.

Support for climate policy We evaluate the effects of our treatments on the change in respondents' stated probability of supporting policies to tackle climate change. Although the average treatment effects are relatively small, we do observe a slight upward revision in support among those receiving information on place-based credits. This increase is not especially large, but it suggests that tying policy provisions to tangible local benefits – such as additional clean-energy tax credits in one's own community – can modestly enhance public willingness to support climate initiatives. By contrast, simply highlighting the IRA's national-level provisions alone shows little effect, implying that localized cues and direct local benefits may be an important channel through which green industrial policy fosters broader pro-climate attitudes.

Does the Inflation Reduction Act reduce inflation expectations? As shown in the bottom right panel of Figure 2, despite its name, our evidence suggests that the Inflation Reduction Act does not, on average, dampen short-run inflation expectations. Neither receiving information about the broad national components of the IRA nor its place-based provisions reduces projected inflation. In fact, individuals who learn about the local "energy community bonus" exhibit a modest but statistically significant *increase* in their inflation expectations – possibly because they anticipate stronger local demand for goods and labor as a result of the incentive, which is in line with their improved labor market outlook.

4.3 Individual Labor Market Outlooks

We now examine how different information treatments affect individuals' own labor market expectations. To mitigate potential experimental demand effects (De Quidt, Haushofer and Roth, 2018), we conducted a follow-up survey on Prolific one week after the initial intervention, allowing the respondents to internalize the provided information about the IRA.

First, Figure C.2 illustrates that our treatments effectively improved respondents' awareness of the IRA. In the follow-up survey, individuals from all treatment groups consistently report significantly higher knowledge levels of the policy compared to the control group. This finding provides confidence that observed changes in expectations are driven by comprehension of the policy rather than immediate experimental cues.

Turning to individual's own labor market outlooks, the top row of Figure 3 documents changes in employed individuals' expected own wage growth and the uncertainty surrounding those wage expectations. We find that receiving information about the place-based provisions of the IRA significantly improves individual wage growth expectations without increasing its uncertainty. This finding is consistent with the fact that employed individuals believe that there are more job opportunities in their industry and occupation after receiving the local treatment, as documented in the upper left panel of Figure C.1. The national treatment in eligible areas is similarly effective in improving an individual's own wage growth outlook. However, the national treatment in non-eligible areas does not have any significant effects nor induce any positive spillover effects.

Moreover, when asked about their relationship with their current employer, respondents receiving place-based IRA information also report a meaningful increase in the likelihood of staying in their current job, along with a decrease in the probability of being laid off. These results suggest that employed individuals interpret the localized incentives provided by the IRA as enhancing job security and wage prospects.

4.4 Job Search Activities

So far, we have presented evidence on how individual beliefs respond to information about the IRA. A natural next step is to understand the extent to which these updated beliefs translate into concrete labor market actions, including active job search or efforts to acquire information about employment opportunities related to the clean-energy transition. In this section, we leverage data from our follow-up survey to directly examine respondents' actual behavioral responses following exposure to IRA-related information.

To examine the impact of different IRA-related information treatments on subjective labor

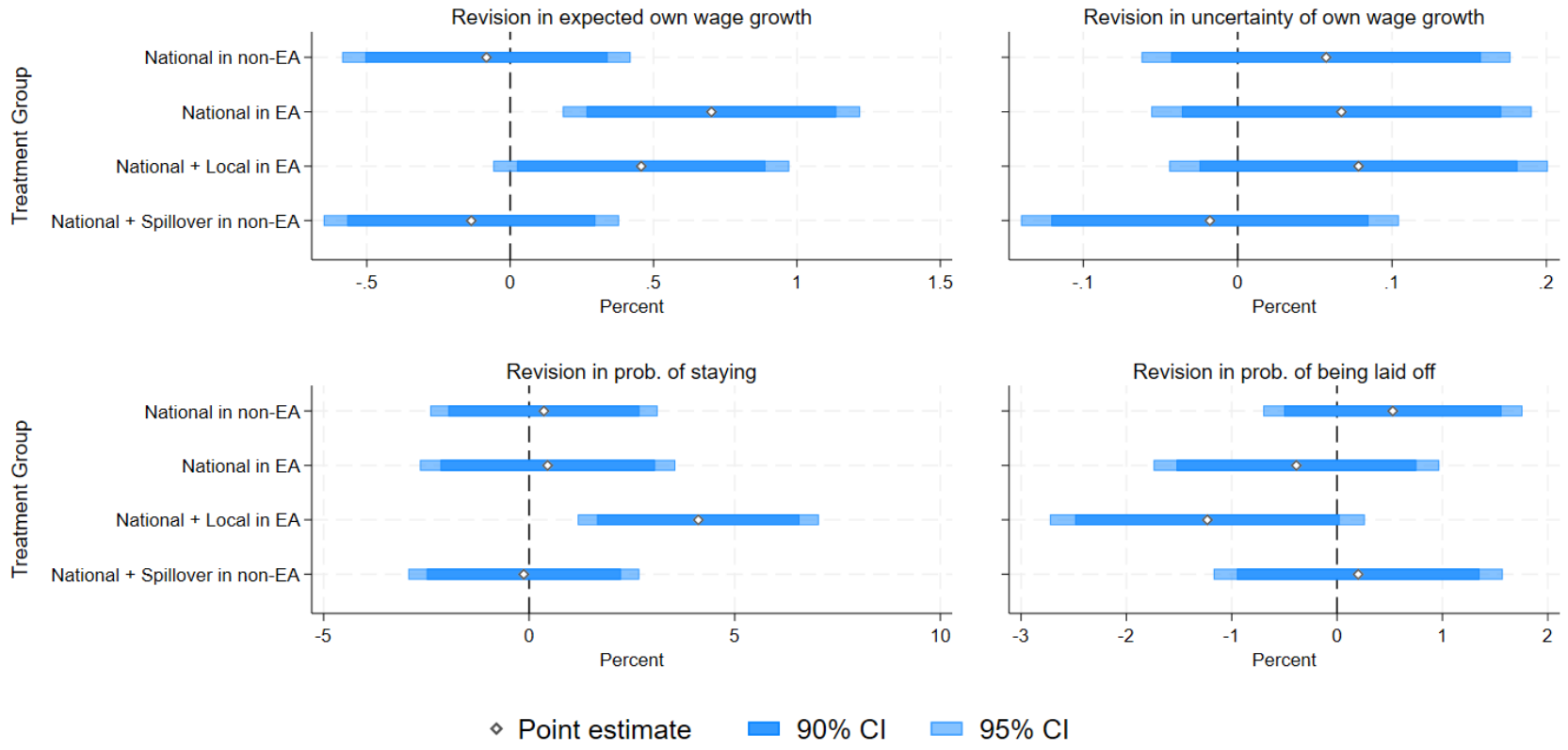


Figure 3: AVERAGE TREATMENT EFFECTS FOR EMPLOYED WORKERS

Note. The figure plots the treatment coefficients along with the 90% and 95% confidence intervals using regression equation (1). The dependent variables are the expected 12-month-ahead individual's own wage growth, own wage growth uncertainty, probability of staying at the same job in the next 12 months, and probability of being laid off in the next 12 months, respectively.

market information acquisition, we estimate the following empirical specification,

$$1^{\text{post}}_{\text{action}} = \alpha_0 + \sum_{j=1,2,3,4,5} \alpha^j \text{Treatment}^j_i + \eta \text{Eligible}_i + \Gamma X_i + \varepsilon_i, \tag{2}$$

where the outcome variable $1^{\text{post}}_{\text{action}}$ is a dummy variable to indicate if respondent i chooses action, including spending time on job search, searching for information about clean energy transition, or searching for renewable energy related jobs. Treatment^j_i is an indicator variable if individual i belongs to treatment group Tj, with the control group as the omitted category. α^j estimates the average treatment effect of information presented in Treatment^j on the action relative to the average change in the control group. Eligible_i is a dummy variable equal to 1 if the individual lives in the area that is eligible for IRA tax bonus and equal to zero otherwise. X_i is a vector of control variables defined in the same way as before. We use robust standard errors.

Of the 3,232 people who responded to the follow-up survey, 2,131 reported spending time on job searching in the past week. Specifically, among the 342 unemployed respondents, 287 (84%) indicated that they had engaged in job searching during the same period. In addition, among all respondents, 399 individuals searched for information on the clean energy transition, while 312 specifically looked for renewable energy-related jobs.

Figure 4 plots the average treatment effects on various actions. We find that employed individuals in eligible areas who received IRA-related information treatment are less likely to search than the control group, likely due to higher wage expectations and a greater likelihood of staying in their current jobs. In contrast, we find suggestive evidence of treatment effects from IRA-related information on job-search behaviors, particularly among unemployed individuals in eligible areas. Specifically, unemployed respondents in eligible areas exhibit significantly increased job-search activities and marginally greater engagement in seeking clean energy transition information.

Unemployed workers exposed to the spillover treatment also exhibit an increased likelihood of searching for renewable energy-related jobs. Figure C.3 shows that individuals in the spillover treatment group do exhibit a slight increase in considering relocation due to IRA, showing willingness to seek work in the neighboring "energy community" region. Taken together, these findings suggest that although spillover information alone does not substantially alter beliefs on a large scale, it may nevertheless prompt a subset of respondents in non-eligible areas to look beyond their local communities in pursuit of job opportunities linked to the clean-energy transition.



Figure 4: AVERAGE TREATMENT EFFECTS ON ACTIONS, BY LABOR MARKET STATUS (FOLLOW UP SURVEY, PROLIFIC)

Note. The figure plots the treatment coefficients along with the 90% and 95% confidence intervals using regression equation (2). The dependent variables are dummies indicating whether a respondent spent time on general job search, searched for information on the clean energy transition, and searched for renewable energy-related job openings, respectively. Regressions are estimated separately for respondents based on their labor market status.

4.5 Potential mechanisms and further discussion

We delve into several potential mechanisms underlying worker responses to the IRA. First, Figure 5 illustrates that perceptions of job security play a central role in worker decisions regarding employment changes. Approximately 31% of respondents cited job security concerns as their primary motivation for remaining with their current employer, despite potentially higher wages elsewhere. This highlights the importance of perceived stability in employment, which shapes labor mobility and retention patterns in response to structural shifts driven by policy interventions such as the IRA.

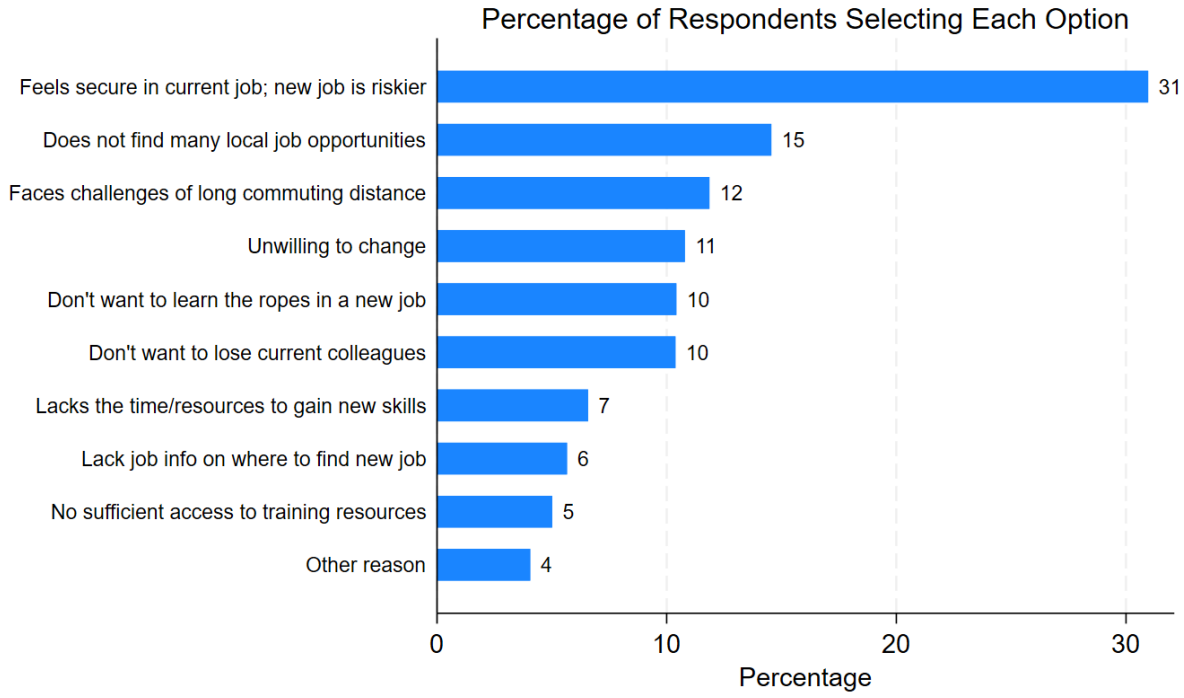


Figure 5: REASONS FOR STAYING AT THE CURRENT EMPLOYER

Note. The figure plots the share of responses to the questions on "What are the main reasons for why you plan to stay at your current employer even though other employers may offer a higher wage?" Respondents are allowed to select multiple options.

Second, commuting constraints significantly restrict labor mobility and potentially limit worker responses to new economic opportunities. When offered a hypothetical scenario of a 30% wage increase at an identical job with an increased commute, 37% of respondents are unwilling to increase their commuting time at all.[5] For those willing to commute longer, the median

[5]The survey question is "Imagine that you received a job offer with a 30% higher wage from another employer and that the job is otherwise identical to your current job. By how much are you willing to increase your commute time?"

acceptable increase was only 20 minutes. This aligns with insights from Monte et al. (2018), emphasizing that the ability of firms to attract workers depends not only on local migration but significantly on commuting patterns from surrounding areas. Consequently, commuting constraints could moderate the local employment response to labor demand shocks triggered by policies like the IRA, potentially limiting the redistribution of labor and skills across geographic areas.

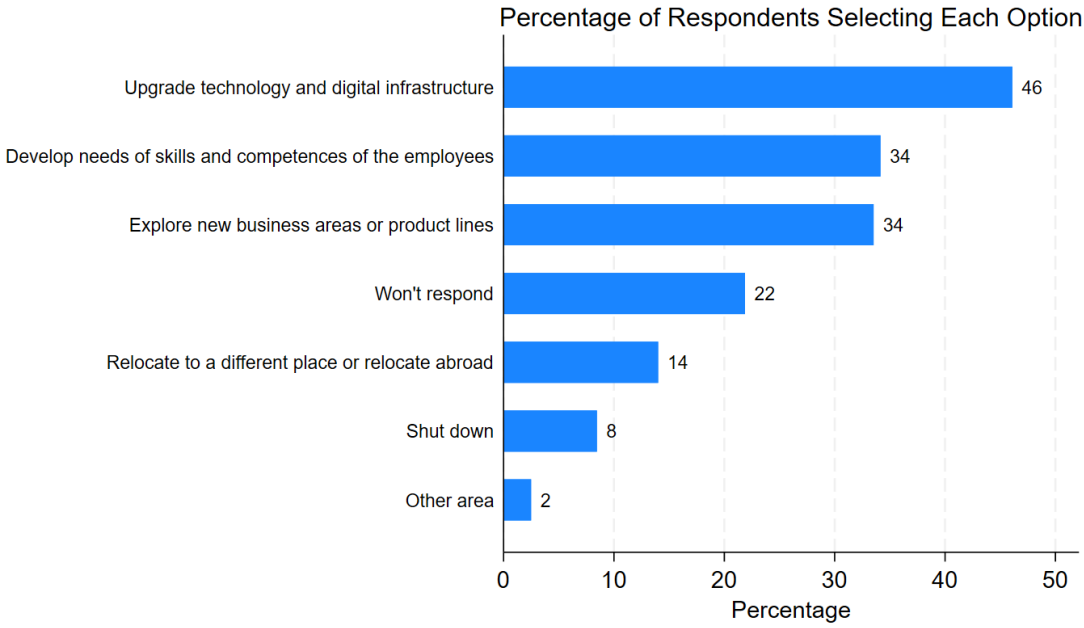


Figure 6: EMPLOYERS IN YOUR CITY HAVE RESPONDED OR WILL RESPOND TO THE IRA

Note. The figure plots the share of responses to the questions on "In which area(s), do you think employers in your city have responded or will respond to the IRA?" Respondents are allowed to select multiple options if "Won't respond" is not selected.

Third, we find diverse perceptions of employer responses to IRA incentives. While approximately 22% of respondents perceive no significant response from local employers, we observe overall positive perceptions as illustrated in Figure 6. In particular, s significant portion (46%) expect investments in technological upgrades. Additionally, 34% anticipate skill development initiatives, and another 34% foresee businesses exploring new product lines or market opportunities. Conversely, a smaller but meaningful portion of respondents anticipate negative firm-side responses, including relocation (14%) or business shutdown (8%). These heterogeneous perceptions point to the importance of understanding how firms adapt to the IRA-driven economic transition.

5 Heterogeneity in Treatment Effects

In this section, we explore heterogeneity in treatment effects across four dimensions: (1) political affiliation, (2) perceived policy durability (measured by the expected probability of the Republicans winning the election), (3) support for energy transition policies, and (4) awareness of the IRA. Our analysis focuses primarily on respondents' expectations regarding aggregate outcomes.

5.1 Political Leaning

Recent research consistently demonstrates a growing polarization among Democrats and Republicans in their perceptions of economic conditions (e.g., Binder et al. 2024). Such polarization is reflected clearly in divergent assessments of economic performance across partisan lines. The IRA was passed only with Democratic votes, inherently reflecting partisan divisions on key ideological issues, including investment strategies, climate policy, and taxation. Unlike broader economic conditions, which partisans may interpret differently based on which party is in power, the IRA directly reflects Democratic priorities, such as clean energy investments and corporate tax changes, which are areas that Republicans have largely opposed. This makes perceptions of the IRA not just a matter of economic optimism but also a reflection of deeper partisan divides.

Given this context, we expect the informational intervention in our RCT to yield varying effects based on respondents' party affiliations. To explore this heterogeneity, we categorize respondents into three groups: (1) strong or moderate supporters of the Democratic Party, comprising 42.7% of respondents; (2) neutral respondents, comprising 26.3%; and (3) strong or moderate supporters of the Republican Party, comprising 31%.[6] We estimate the specification described in equation (1) separately for each subgroup, allowing us to identify the group-specific average treatment effects (e.g., comparing expectation revisions between treated Democrats and control Democrats). Figure 7 presents the estimation results.

Among Democratic and neutral respondents, exposure to information about the place-based provisions of the IRA significantly raised their expectations of earnings growth in their city and the automobile industry compared to the control group. Specifically, Democratic respondents who received information about the place-based IRA provisions expected notably higher city-wide and industry-specific earnings growth, while neutral respondents similarly reported increased expectations for city-wide earnings growth (approximately 0.9%). In contrast, Republican respondents did not exhibit statistically significant revisions in their expectations for earnings growth in response to the treatments. Rather, Republicans viewed place-based IRA

[6] Party affiliations are measured using the survey question, "Are you a strong or moderate supporter of the Democratic or Republican Party?"

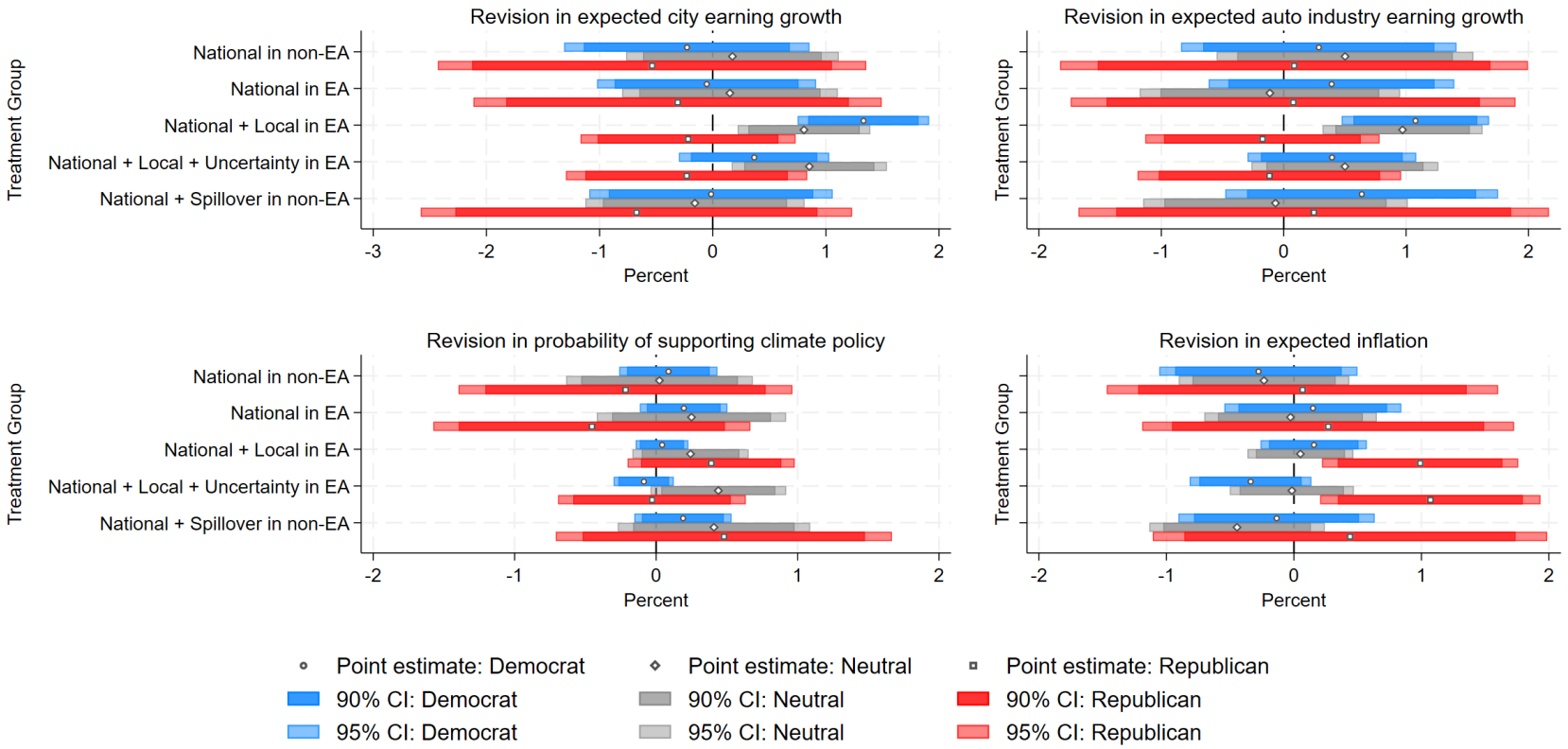


Figure 7: AVERAGE TREATMENT EFFECTS BY POLITICAL LEANING

Note. The figure plots the treatment coefficients along with the 90% and 95% confidence intervals using regression equation (1). The dependent variables are the expected 12-month-ahead city earnings growth, expected 12-month-ahead auto industry earnings growth, probability of supporting climate change policy, and expected 12-month inflation, respectively. The regressions are estimated separately for respondents in each political leaning category. Results are based on Huber-robust estimates.

provision treatments as potentially inflationary, revising their inflation expectations upward by approximately 1%, even when policy uncertainty was explicitly mentioned.

We find no evidence that any treatment influenced respondents' general support for climate policy across political subgroups. This aligns with observed baseline differences in pre-existing climate policy attitudes: Democratic respondents expressed the highest initial support (86%), followed by neutral respondents (69%), while Republicans indicated the lowest (56%). Given these substantial partisan differences, providing additional information about the IRA does not appear to narrow or widen existing differences.

Our results highlight that beyond direct policy design, individuals' political leaning shape their economic outlook, influencing how they interpret and respond to policy information. These findings have important implications for policymakers aiming to build credibility and ensure broad-based support for economic initiatives. Although clear and targeted communication can reinforce confidence among receptive groups, the lack of response among Republican respondents, coupled with their heightened inflation concerns, presents a challenge. One way to alleviate this challenge is by emphasizing the economic benefits of energy community tax credits, particularly in terms of job creation, American energy independence, and support for manufacturing. Framing these incentives as tools for strengthening local economies and revitalizing industrial regions may help broaden bipartisan support.

5.2 Perceived Policy Durability

As a form of industrial policy, the IRA directs public resources toward specific sectors, particularly clean energy and infrastructure, aiming to reshape the industrial landscape. Yet, its future remains contingent on political dynamics and uncertainty. President Donald Trump has been a vocal critic of the IRA before the 2024 election, labeling it the "biggest tax hike in history" and expressing intentions to dismantle its provisions once re-elected. Given the sharp partisan divide surrounding the IRA, perceptions about its durability are closely tied to expectations about future political leadership. If a Republican administration takes office, there is a significant likelihood of modifications or even rollbacks to the IRA, raising questions about the stability of its intended economic benefits. In this section, we investigate how individuals' beliefs regarding the likelihood of a Republican victory in the 2024 presidential election influence their expectations about the IRA's economic impacts.

We categorize respondents based on their perceived probability of a Republican victory in the 2024 presidential election into three groups: those who assign a probability below 35% (not likely), between 35% and 75% (likely), and above 75% (highly likely), comprising 23.5%, 53.5%,

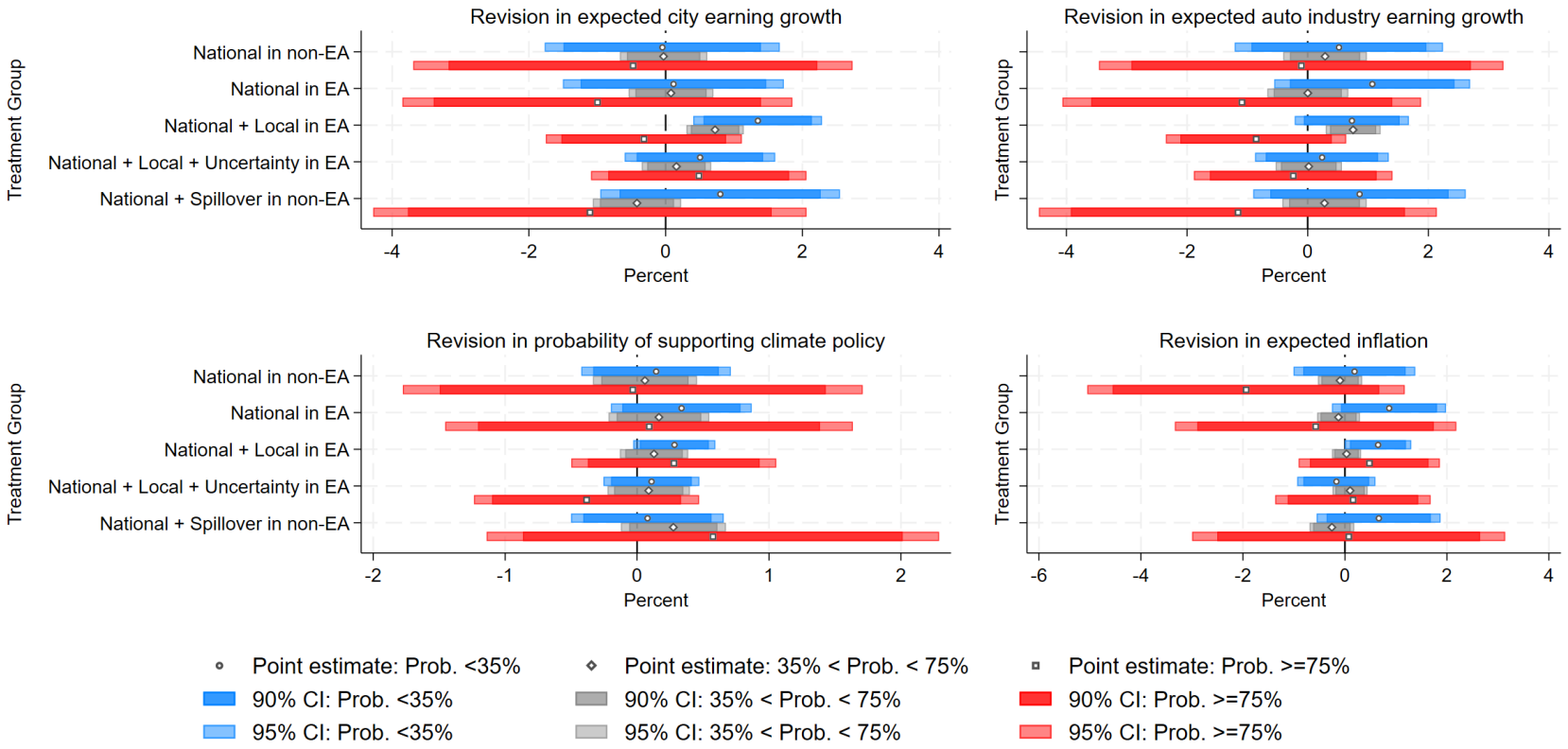


Figure 8: AVERAGE TREATMENT EFFECTS BY BELIEFS OF REPUBLICANS WIN THE ELECTION

Note. The figure plots the treatment coefficients along with the 90% and 95% confidence intervals using regression equation (1). The dependent variables are the expected 12-month-ahead city earnings growth, expected 12-month-ahead auto industry earnings growth, probability of supporting climate change policy, and expected 12-month inflation, respectively. Regressions are estimated separately for respondents in each perceived election outcome probability group. Results are based on Huber-robust estimates.

and 23% of the respondents, respectively.[7] The estimation results are shown in Figure 8.

Our findings reveal a strong interaction between perceived electoral outcomes and expectations of the IRA's economic impact. Respondents who believed the probability of a Republican presidential victory was below 75% significantly increased their expectations of earnings growth in their city and the local automobile industry when exposed to information about the place-based IRA provisions. Among them, respondents who saw a Republican victory as not likely (below 35%) expected higher inflation after receiving information about place-based IRA provisions, and they also reported stronger support for climate policy. In contrast, those who viewed a Republican victory as highly probable (above 75%) showed no statistically significant changes in expectations across any treatment conditions.

These results contribute to the broader literature on policy uncertainty and economic expectations. When policies are perceived as politically vulnerable, their ability to drive long-term economic activity weakens, potentially discouraging firm investment and household financial planning. Beyond policy design itself, individuals' beliefs about political stability play a crucial role in shaping their economic outlook. This underscores the importance of credibility and long-term policy commitments in fostering household economic expectations.

5.3 Energy Transition and Awareness of the IRA

The energy transition refers to the global energy sector's shift from fossil-based systems of energy production and consumption – including oil, natural gas and coal — to renewable energy sources like wind and solar. Individuals' expectations about this transition may shape their economic behavior, support for policy initiatives, and local investment decisions. If those who view the transition positively are more optimistic about policies like the IRA, it suggests that beliefs about long-term structural change influence expectations about local economic policies.

To examine this relationship, we elicit survey responses on views of the energy transition and classify respondents into three groups: those who perceive the transition as negative, neutral, or positive.[8] As shown in Figure C.4, individuals who believe the energy transition will positively impact the local economy are more likely to expect the local IRA policy to increase city earnings and auto industry earnings. The pre-treatment probably of supporting climate policy correlates strongly with support for energy transitions, with a 86% chance of those viewing the transition positively supporting climate policy, compared to a 70% chance of neutral respondents and only a 49% chance among those with a negative perception. We find no evidence that any treatment

[7] The survey question is as follows: "What do you think is the percent chance that the Republican party will win the presidential election?"

[8] The survey question is as follows: "To what extent do you think your local economy will be affected by the energy transition?" The choices range from strongly negative, negative, neutral, positive, and strongly positive.

heterogeneously increased support for climate policy relative to the control group within these perception-based subgroups.

Lastly, prior literature (e.g., Weber, Candia, Afrouzi, Ropele, Lluberas, Frache, Meyer, Kumar, Gorodnichenko, Georgarakos et al. 2025) has shown that the size of information treatment effects depends on whether survey respondents are already aware of the provided treatment beforehand. To examine this, we categorized individuals based on their pre-treatment knowledge of the IRA. As shown in Figure C.5, individuals with little or no prior knowledge of the IRA before the treatment are more likely to believe that local IRA policies will increase city earnings and auto industry earnings. In contrast, those with some or extensive knowledge of the IRA exhibit different expectations.

6 Conclusion

The Inflation Reduction Act represents the most substantial federal investment in clean energy in U.S. history, yet its impact on local economic activities and subjective labor market perceptions remains largely underexplored. Our study addresses this gap using a randomized controlled trial design to identify the causal effects of IRA's place-based provisions on workers' labor market expectations. We show that while information about the IRA's national provisions does not significantly alter perceptions of job projects, place-based policies lead individuals to significantly revise their expectations — particularly in eligible areas, where existing workers anticipate stronger earnings growth and increased job security, and unemployed workers are more likely to search for jobs. These findings highlight the important role of localized policies in shaping labor market expectations and guiding workforce adaptation during the clean energy transition.

Our research also highlights how policy uncertainty — in terms of eligibility rules and policy durability — can dampen the formation of positive labor market expectations. In addition, we discuss factors which influence public support for green industrial policies. A deeper understanding of these aspects of green industrial policy is essential for designing more effective policies that support vulnerable communities during the energy transition.

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Appendix A Sample characteristics and summary statistics

Appendix Table A.1: DEMOGRAPHIC DISTRIBUTION BY TREATMENT GROUPS

	(1)	(2)	(3)	(4)	(5)
Panel A: Prolific Non-eligible Area					
	Control	National	National + Spillover	Total	Test
N	736 (34%)	732 (33.81%)	697 (32.19%)	2165 (100%)	
Female (dummy)	0.59 (0.49)	0.55 (0.50)	0.59 (0.49)	0.58 (0.49)	0.26
Hispanic (dummy)	0.08 (0.27)	0.07 (0.25)	0.08 (0.27)	0.07 (0.26)	0.63
White (dummy)	0.73 (0.44)	0.75 (0.43)	0.74 (0.44)	0.74 (0.44)	0.71
Black (dummy)	0.18 (0.39)	0.16 (0.37)	0.20 (0.40)	0.18 (0.38)	0.26
Asian (dummy)	0.06 (0.24)	0.06 (0.24)	0.06 (0.24)	0.06 (0.24)	0.97
Age category					
age 18-30	147 (20.33%)	135 (18.78%)	123 (17.65%)	405 (18.93%)	0.21
age 30-45	310 (42.88%)	318 (44.23%)	285 (40.89%)	913 (42.68%)	
age 45-55	165 (22.82%)	163 (22.67%)	159 (22.81%)	487 (22.77%)	
above 55	101 (13.97%)	103 (14.33%)	130 (18.65%)	334 (15.61%)	
Education category					
non college	105 (14.54%)	129 (17.94%)	100 (14.35%)	334 (15.62%)	0.24
some college	208 (28.81%)	214 (29.76%)	203 (29.12%)	625 (29.23%)	
bachelor	409 (56.65%)	376 (52.29%)	394 (56.53%)	1179 (55.14%)	
Income category					
income below 50K	268 (37.02%)	267 (37.13%)	250 (35.87%)	785 (36.68%)	0.83
income 50K-100K	251 (34.67%)	259 (36.02%)	262 (37.59%)	772 (36.07%)	
income above 100K	205 (28.31%)	193 (26.84%)	185 (26.54%)	583 (27.24%)	

	(1)	(2)	(3)	(4)	(5)
Panel B: Prolific Eligible Area					
	Control	National	National + Local	Total	Test
N	661 (32.09%)	672 (32.62%)	727 (35.29%)	2060 (100%)	
Female (dummy)	0.54 (0.50)	0.54 (0.50)	0.54 (0.50)	0.54 (0.50)	0.95
Hispanic (dummy)	0.15 (0.36)	0.17 (0.37)	0.16 (0.37)	0.16 (0.37)	0.72
White (dummy)	0.71 (0.45)	0.71 (0.46)	0.69 (0.46)	0.70 (0.46)	0.75
Black (dummy)	0.16 (0.36)	0.14 (0.34)	0.15 (0.36)	0.15 (0.35)	0.54
Asian (dummy)	0.11 (0.31)	0.11 (0.31)	0.11 (0.31)	0.11 (0.31)	0.96
Age category					
age 18-30	176 (26.75%)	166 (24.96%)	200 (27.70%)	542 (26.50%)	0.22

age 30-45	306 (46.50%)	289 (43.46%)	296 (41%)	891 (43.57%)	
age 45-55	113 (17.17%)	133 (20%)	155 (21.47%)	401 (19.61%)	
above 55	63 (9.57%)	77 (11.58%)	71 (9.83%)	211 (10.32%)	
Education category					
non college	89 (13.53%)	75 (11.28%)	93 (12.88%)	257 (12.57%)	0.77
some college	193 (29.33%)	199 (29.92%)	219 (30.33%)	611 (29.88%)	
bachelor	376 (57.14%)	391 (58.80%)	410 (56.79%)	1177 (57.56%)	
Income category					
income below 50K	198 (30.09%)	205 (30.83%)	239 (33.10%)	642 (31.39%)	0.57
income 50K-100K	264 (40.12%)	247 (37.14%)	265 (36.70%)	776 (37.95%)	
income above 100K	196 (29.79%)	213 (32.03%)	218 (30.19%)	627 (30.66%)	

	(1)	(2)	(3)	(4)	(5)
Panel C: Qualtrics					
	Control	National + Local	National + Local + Unc.	Total	Test
N	1719 (33.54%)	1704 (33.25%)	1702 (33.21%)	5125 (100%)	
Female (dummy)	0.58 (0.49)	0.61 (0.49)	0.61 (0.49)	0.60 (0.49)	0.18
Hispanic (dummy)	0.10 (0.30)	0.09 (0.29)	0.09 (0.29)	0.10 (0.29)	0.42
White (dummy)	0.73 (0.44)	0.76 (0.43)	0.73 (0.45)	0.74 (0.44)	0.04
Black (dummy)	0.19 (0.39)	0.17 (0.38)	0.18 (0.38)	0.18 (0.39)	0.50
Asian (dummy)	0.05 (0.21)	0.04 (0.20)	0.05 (0.22)	0.05 (0.21)	0.30
Other race (dummy)	0.05 (0.22)	0.04 (0.19)	0.05 (0.22)	0.05 (0.21)	0.11
Age category					
age 18-30	178 (10.35%)	141 (8.27%)	175 (10.28%)	494 (9.64%)	0.15
age 30-45	485 (28.21%)	463 (27.17%)	482 (28.32%)	1430 (27.90%)	
age 45-55	368 (21.41%)	351 (20.60%)	351 (20.62%)	1070 (20.88%)	
above 55	688 (40.02%)	749 (43.96%)	694 (40.78%)	2131 (41.58%)	
Education category					
non college	465 (27.05%)	483 (28.35%)	522 (30.67%)	1470 (28.68%)	0.20
some college	614 (35.72%)	584 (34.27%)	570 (33.49%)	1768 (34.50%)	
bachelor	640 (37.23%)	637 (37.38%)	610 (35.84%)	1887 (36.82%)	
Income category					
income below 50K	844 (49.10%)	795 (46.65%)	850 (49.94%)	2489 (48.57%)	0.10
income 50K-100K	526 (30.60%)	580 (34.04%)	547 (32.14%)	1653 (32.25%)	
income above 100K	349 (20.30%)	329 (19.31%)	305 (17.92%)	983 (19.18%)	

Notes: This table reports the demographic distribution of our sample. Panels A - C report the distributions for Prolific non-eligible areas, Prolific eligible areas, and Qualtrics respondents, respectively. Column (1) reports the distribution of the control group, Columns (2) - (3) report the distribution of the treatment groups, and Column (4) reports the distribution of the overall sample. Column (5) provides the p-value of the balance tests comparing the control and treatment groups.

Appendix Table A.2: SUMMARY STATISTICS OF PRE-TREATMENT EXPECTATIONS BY TREATMENT GROUPS

Panel A: Prolific Non-eligible Area	(1)	(2)	(3)	(4)	(5)
	Control	National	National + Spillover	Total	Test
N	736 (34.00%)	732 (33.81%)	697 (32.19%)	2165 (100.00%)	
Expected earnings growth	2.27 (8.96)	2.17 (7.77)	1.70 (7.26)	2.06 (8.04)	0.36
Expected auto sector earnings growth	2.90 (9.95)	2.58 (8.06)	2.72 (8.31)	2.73 (8.82)	0.79
Expected inflation	4.64 (10.86)	4.25 (10.00)	3.94 (8.82)	4.28 (9.95)	0.41
Expected individual earnings growth	5.66 (8.84)	5.29 (9.06)	5.41 (8.40)	5.46 (8.76)	0.78
Individual earnings growth uncertainty	1.82 (2.26)	1.71 (2.02)	1.85 (2.33)	1.79 (2.21)	0.56
Support for climate policy	72.34 (29.02)	73.74 (28.77)	73.88 (28.16)	73.31 (28.66)	0.53
Prob. of staying in current job	72.70 (29.92)	72.51 (30.97)	74.25 (28.92)	73.15 (29.93)	0.58
Prob. of being laid off	6.39 (11.39)	5.63 (10.75)	5.09 (9.94)	5.71 (10.72)	0.13
Prob. of quitting job	13.37 (20.79)	14.73 (23.72)	13.96 (21.91)	14.01 (22.14)	0.60
Prob. of leaving for other reasons	7.53 (14.93)	7.13 (13.97)	6.70 (14.11)	7.13 (14.35)	0.63
Prob. of looking for a job in 3 months	22.99 (33.65)	28.53 (34.90)	26.63 (35.38)	26.19 (34.62)	0.52
Prob. of looking for a job in 12 months	32.85 (38.43)	42.71 (37.46)	35.04 (36.13)	37.25 (37.50)	0.14
Prob. of finding a job in 3 months	37.31 (31.57)	35.88 (29.44)	36.88 (31.49)	36.65 (30.64)	0.95
Prob. of finding a job in 12 months	59.90 (32.47)	59.86 (30.33)	59.80 (32.31)	59.86 (31.50)	1

Panel B: Prolific Eligible Area	(1)	(2)	(3)	(4)	(5)
	Control	National	National + Local	Total	Test
N	661 (32.09%)	672 (32.62%)	727 (35.29%)	2060 (100.00%)	
Expected earnings growth	2.08 (7.77)	2.10 (8.14)	2.50 (8.41)	2.23 (8.12)	0.54
Expected auto sector earnings growth	2.94 (8.49)	3.18 (8.64)	2.72 (8.22)	2.94 (8.44)	0.60
Expected inflation	4.45 (10.23)	4.76 (10.01)	4.80 (10.02)	4.68 (10.08)	0.78
Expected individual earnings growth	6.13 (9.58)	5.59 (8.55)	5.90 (9.22)	5.87 (9.12)	0.64
Individual earnings growth uncertainty	2.04 (2.32)	1.76 (2.00)	1.95 (2.35)	1.92 (2.23)	0.11
Support for climate policy	75.79 (24.77)	72.76 (28.44)	73.67 (28.20)	74.05 (27.25)	0.11
Prob. of staying in current job	72.73 (29.45)	71.81 (30.51)	69.55 (31.18)	71.33 (30.42)	0.20
Prob. of being laid off	7.05 (12.76)	6.21 (11.43)	6.80 (12.95)	6.69 (12.41)	0.53
Prob. of quitting job	13.30 (19.81)	15.11 (23.18)	15 (21.64)	14.48 (21.60)	0.30
Prob. of leaving for other reasons	6.93 (12.44)	6.87 (13.29)	8.65 (15.92)	7.50 (14.02)	0.06
Prob. of looking for a job in 3 months	24.33 (33.47)	24.93 (32.87)	29.76 (36.43)	26.63 (34.43)	0.53
Prob. of looking for a job in 12 months	37.95 (37.79)	38.79 (35.14)	46.37 (38.83)	41.49 (37.48)	0.27
Prob. of finding a job in 3 months	31.09 (28.84)	34.61 (31.48)	36.07 (33.36)	34.16 (31.40)	0.68
Prob. of finding a job in 12 months	61.75 (31.15)	64.15 (31.53)	61.92 (31.26)	62.61 (31.16)	0.90

Panel C: Qualtrics

	(1)	(2)	(3)	(4)	(5)
	Control	National + Local	National + Local + Unc.	Total	Test
N	1719 (33.54%)	1704 (33.25%)	1702 (33.21%)	5125 (100.00%)	
Expected earnings growth	2.87 (11.80)	2.18 (10.57)	2.46 (10.57)	2.51 (11.00)	0.18
Expected auto sector earnings growth	3.24 (12.32)	3.62 (11.74)	2.91 (11.53)	3.26 (11.87)	0.22
Expected inflation	5.88 (14.41)	5.50 (14.21)	5.97 (14.65)	5.79 (14.42)	0.60
Expected individual earnings growth	9.50 (13.90)	8.86 (13.93)	8.01 (13.41)	8.82 (13.76)	0.06
Individual earnings growth uncertainty	2.91 (3.37)	3.13 (3.61)	2.91 (3.39)	2.98 (3.45)	0.31
Support for climate policy	70.60 (28.51)	71.03 (29.53)	70.58 (29.00)	70.74 (29.01)	0.88
Prob. of staying in current job	75.94 (30.05)	74.73 (30.08)	75.45 (30.51)	75.40 (30.20)	0.68
Prob. of being laid off	5.69 (10.97)	6 (11.43)	5.97 (11.57)	5.88 (11.31)	0.80
Prob. of quitting job	10.17 (16.92)	10.42 (16.73)	10.33 (16.62)	10.30 (16.76)	0.94
Prob. of leaving for other reasons	8.20 (14.76)	8.85 (15.28)	8.25 (14.06)	8.42 (14.71)	0.58
Prob. of looking for a job in 3 months	11.42 (25.22)	9.28 (22.86)	10.10 (24.52)	10.21 (24.17)	0.29
Prob. of looking for a job in 12 months	15.72 (28.95)	15.33 (29.47)	16.18 (30.63)	15.74 (29.71)	0.87
Prob. of finding a job in 3 months	45.01 (34.32)	43.45 (34.09)	42.52 (34.02)	43.61 (34.07)	0.83
Prob. of finding a job in 12 months	62.46 (34.39)	60.42 (34.73)	59 (34.04)	60.56 (34.33)	0.70

Notes: This table reports the summary statistics of pre-treatment outcome variables from our sample. Panels A - C report the summary statistics for Prolific non-eligible areas, Prolific eligible areas, and Qualtrics respondents, respectively. Column (1) reports the statistics of the control group, Columns (2) - (3) report the statistics of the treatment groups, and Column (4) reports the statistics of the overall sample. Column (5) provides the p-value of the balance tests comparing the control and treatment groups.

Appendix B Survey Questionnaire

Opening

In the survey, we ask about your perceptions of the current economic situation and your personal outlook.

No special knowledge is required, and there are no right or wrong answers to the survey. It is important for us that you state your own opinion, not others' opinions, so please do not consult with others or look for external sources of information. Any answer is correct as long as it truly reflects your opinion!

Section 1: Introduction

Q1. How likely will you support a climate policy in general targeted to address issues related climate change?

Slider bar from 0 to 100

Q2. Are you a strong or moderate supporter for the Democrat/Republican party?

Please use the slider below, where left means "Strong Democrat", middle means "Neutral" and right means "Strong Republican".

Q3. What do you think is the percent chance that the Republican party will win the presidential election? Please choose a number between 0 and 100, where 0 indicates absolutely no chance and 100 indicates absolutely for sure and 50 indicates even odds.

Slider bar from 0 to 100

Section 2. Labor market

Section 2.1: Labor market status

QUESTION 2.1

What is your current employment situation?

Please select all that apply.

[Validation: Error message if (1 or 2) and 4 are selected at the same time.]

1. Working full-time (for someone or self-employed)
2. Working part-time (for someone or self-employed)
3. Unpaid work (e.g., unpaid internship, volunteering, etc.)
4. Not working, but would like to work
5. Temporarily laid off
6. On sick or other leave
7. Permanently disabled or unable to work
8. Retiree or early retiree
9. Student, at school or in training
10. Stay-at-home spouse
11. Other (please specify) _____

Employed: Q2.1 = 1 or 2

Unemployed: Q2.1 = 3, 4 or 5, and not Q2.1 =1 and not Q2.1 =2

Not in the labor force: Q2.1 NOT = 1 – 5

Section 2.2 Labor market outlook

Section 2.2A Aggregate labor market outlook

[This subsection applies to ALL respondent]

QUESTION 2.2

Over the next 12 months, how much do you think that the average earnings in your city will change? [Range: 0 to 50]

1. increased by [ ]%
2. No change
3. decreased by [ ]%

QUESTION 2.3

Over the next 12 months, do you think that the average earnings of employees in automobile and power generation related industries will increase or decrease? [Range: 0 to 50]

1. increased by [ ]%
2. No change
3. decreased by [ ]%

QUESTION 2.4

[Prolific] What do you think will be the unemployment rate 12 months from now in the US?

[Qualtrics] Do you plan to take additional trainings in preparation for potential job search within the coming 12 months? [Yes/No]

QUESTION 2.5

How much do you think consumer prices in general will change in the next twelve months in the US? [Range: 0 to 50]

Please provide an answer in percentage terms.

1. increased by [ ]%
2. No change
3. decreased by [ ]%

Section 2.2B Current employment outlook

[This subsection only applies to employed: Q2.1 = 1 or 2]

QUESTION 2.6

Please think about your possible relationship with your current employer of your main job during the next 12 months. Assign the probability in each possible case. The sum of the probabilities should be 100.

1. Staying with the current employer during the next 12 months
2. Laid-off from current employer at some point during the next 12 months
3. Quit from the current employer at some point during the next 12 months
4. Separation for other reasons during the next 12 months

QUESTION 2.7

[If Question 2.6 Staying with the current employer > 0]

Suppose again that, 12 months from now, you are working in the exact same job at the same place you currently work with the exact same number of hours.

Please give your best guess about the lowest earnings growth rate and the highest earnings growth rate.

QUESTION 2.7A

What do you think the lowest growth rate of your earnings will be over the next 12 months?

Slider with range from -50% to 50%

QUESTION 2.7B

What do you think the highest growth rate of your earnings will be over the next 12 months?

Slider with range from -50% to 50%

QUESTION 2.7C

What do you think is the percentage chance that the growth rate of your earnings over the next 12 months will be greater than (Q2.8A + Q2.8B)/2 %?

Slider with range from 0% to 100%

[QUALTRICS] QUESTION 2.8

Over the next 12 months, do you think that the average earnings of employees working in the same occupation with similar experience as you will increase or decrease? [Range: 0 to 50]

1. Increase by [ ]%
2. No change
3. Decrease by [ ]%

[QUALTRICS] QUESTION 2.9

Imagine that you were forced to leave your current job and that you had 3 months to **find a job at another employer in the same occupation**. We would like to know your best guess about the overall pay for this job compared to your current pay. What do you think is the **lowest** and **highest** possible percentage change in the overall pay for this job compared to your current job?

Instructions: A negative percentage means a decrease in the overall pay, while a positive percentage means an increase.

Q2.9A lowest possible (percentage change)

Q2.9B highest possible (percentage change)

Slider with range from -50% to 50%

Q2.9C What do you think is the probability that the overall pay for this job compared to your current job will exceed (Q2.8A + Q2.8B)/2 %?

Slider with range from 0% to 100%

[PROLIFIC] QUESTION 2.9

[If Question 2.6 Quit > 0]

Why are you looking to possibly leave your current job?

Please select all that apply.

- dissatisfied with current employer
- for higher compensation
- for more desired hours
- for other non-wage benefits (pension, extended health and dental benefits, insurance etc.)
- for better match with your skills and/or experience
- need to relocate
- to retire
- to return to school
- other (please specify) _____

Section 2.2C Job finding outlook

[This subsection only applies to Q2.1 = 3, 4 or 5, and not Q2.1 =1 and not Q2.1 =2]

QUESTION 2.12

Looking at the future, what do you think is the percent chance that within the coming months, you will find a [INSERT full-time IF Q2.1A=YES] job that you will accept, considering the pay and type of work?

Please use the slider below, where 0% means "Absolutely no chance" and 100% means "Absolutely certain".

Coming 3 months

Coming 12 months

QUESTION 2.13 [RESERVATION WAGE]

Suppose someone offered you a job today. What is the lowest wage or salary you would accept (BEFORE taxes and deductions) for the type of work you are looking for? [Range: 0 - 999,999]
Please choose one of the following.
$_____ per month

Section 2.2D Entering the labor market

[This subsection only applies to Q2.1 NOT = 1 - 5]

QUESTION 2.15

What do you think is the percent chance that you will look for job opportunities within the coming months?

Please use the slider below, where 0% means "Absolutely no chance" and 100% means "Absolutely certain".
3 months
12 months

[PROLIFIC] QUESTION 2.16

[If Question 2.15 > 0]
Are you currently taking or planning to take additional trainings in preparation for potential job search within the coming 12 months?
Yes
No

Section 3. Treatment

ATTENTION CHECK QUESTION

This is a question to check whether you are paying attention and reading the questions carefully. Please select both "strongly disagree" and "strongly agree" to continue. Otherwise, you will leave the survey.

- Strongly agree
- Agree
- Neither strongly agree or disagree
- Disagree
- Strongly disagree

QUESTION 3.1

Have you heard or read about the federal law called the "Inflation Reduction Act of 2022" (also known as the "IRA"), a bill that was passed by the U.S. Congress?

1. A little
2. Some
3. A lot
4. Nothing at all

[If Q3.1 NOT= "Nothing at all"]

QUESTION 3.2

What, if anything, that comes to mind when you think about the Inflation Reduction Act of 2022?
[Open text]

QUESTION 3.3

Energy transition refers to the global energy sector's shift from fossil-based systems of energy production and consumption — including oil, natural gas and coal — to renewable energy sources like wind and solar.
To what extent, do you think your local economy will be affected by the energy transition?

Strongly negative, negative, neutral, positive, strongly positive

RESPONDENTS WILL BE RANDOMLY ASSIGNED TO ONE OF THE FOLLOWING GROUPS:

CONTROL GROUP [NO INFORMATION PROVIDED]

TREATMENT GROUP 1: NATIONAL POLICY ONLY

TREATMENT GROUP 2: NATIONAL + PLACE BASED [ELIGIBLE AREAS ONLY]

TREATMENT GROUP 3: NATIONAL + PLACE BASED + UNCERTAINTY [QUALTRICS ONLY]

TREATMENT GROUP 4: NATIONAL + SPILLOVER [NON-ELIGIBLE AREAS ONLY]

On the next screen, we provide you with information about the Inflation Reduction Act in the US. We would like to ask you to review this information carefully. Please note that this information will be shown only once and you will not be able to go back to it.

NATIONAL POLICY: INFLATION REDUCTION ACT (IRA)

The Inflation Reduction Act (IRA), signed into law in August 2022, is the largest initiative ever undertaken in the U.S. to invest in clean energy and address climate change. **The IRA offers significant tax incentives for production and investment in renewable energy projects.**

PLACE BASED POLICY

Your city has previously qualified for the "Energy Community Bonus" under the IRA due to its historical role in energy production. This bonus, designed to **stimulate local clean energy jobs**, offers an **additional tax credit of up to 10% for production or investment in renewable energy projects.**

UNCERTAINTY

Qualification for this bonus credit changes over time depending on your local economic conditions. The next update will take place around May/June 2025.

SPILLOVER

Certain cities in the US have previously qualified for the "Energy Community Bonus" under the IRA due to their historical role in energy production. This bonus, designed to **stimulate local clean energy jobs**, offers an **additional tax credit of up to 10% for production or investment in renewable energy projects.**

While your city has not yet qualified for the "Energy Community Bonus", it remains eligible for nationwide tax incentives for renewable energy projects under the IRA.

[The remaining questions in this section apply only to the treatment groups]

QUESTION 3.4

The message was about (choose one):

1. Inflation reduction act (IRA)
2. Population growth
3. GDP growth
4. Other [Open text]

QUESTION 3.5

Do you think that you will relocate to a different city due to IRA?

- Yes
- No

[QUALTRICS] QUESTION 3.6

In which area(s), do you think employers in your city has responded or will respond to the IRA? [select all that applies]

1. Won't respond.
2. Develop needs of skills and competences of the employees
3. Upgrade technology and digital infrastructure
4. Explore new business areas or product lines
5. Relocate to a different place or relocate abroad
6. Shut down
7. Other [open text]

Section 4. post-treatment labor market outlook

You are almost done with the survey. In the next few questions, we would now like to ask you *again* about labor market outlook.

Section 4A. Aggregate labor market outlook (Section 2.2A)

QUESTION 4.1

From September 2024 to September 2025, how much do you think that the average earnings in your city will change?

SLIDER [Range: -50 to 50]

QUESTION 4.2

From September 2024 to September 2025, how much do you think that the average earnings of employees in automobile and power generation related industries will increase or decrease?

SLIDER [Range: -50 to 50]

QUESTION 4.3

From September 2024 to September 2025, how much do you think consumer prices in general will change in the US?

SLIDER [Range: -50 to 50]

QUESTION 4.4

[Prolific] What do you think the unemployment rate will be in the U.S. economy in September 2025?

SLIDER [Range: -50 to 50]

[Qualtrics] From October 2024 to October 2025, do you plan to take additional trainings in preparation for potential job search? [Yes/No]

Section 4B. For Employed (Revised version of Section 2.2B)

QUESTION 4.5

Please think again about your possible relationship with your current employer of your main job during the next 12 months. Assign the probability in each possible case. The sum of the probabilities should be 100.

1. Staying with the current employer during the next 12 months
2. Laid-off from current employer at some point during the next 12 months
3. Quit from the current employer at some point during the next 12 months
4. Separation for other reasons during the next 12 months

[PROLIFIC] QUESTION 4.6

[If Question 4.6 New Staying with the current employer > 0]

Suppose again that, 12 months from now, you are working in the exact same job at the same place you currently work with the exact same number of hours. In your view, what would you say is the percent chance that 12 months from now, your earnings before taxes and deductions, will have...

increased by 12% or more	_____	percent chance
increased by 8% to 12%	_____	percent chance
increased by 4% to 8%	_____	percent chance
increased by 2% to 4%	_____	percent chance
increased by 0% to 2%	_____	percent chance
decreased by 0% to 2%	_____	percent chance
decreased by 2% to 4%	_____	percent chance
decreased by 4% to 8%	_____	percent chance
decreased by 8% to 12%	_____	percent chance
decreased by 12% or more	_____	percent chance
Total	100	

[PROLIFIC] QUESTION 4.7

[If Question 4.5 Quit > 0]

Why are you looking to possibly leave your current job?

[Open text]

[QUALTRICS] QUESTION 4.6A

[If Question 4.5 New Staying with the current employer > 0]
We would now like to ask you again about the possible growth rates of your earnings.

Suppose again that, 12 months from now, you are **working in the exact same job at the same place you currently work, with the exact same number of hours.** What do you think will be the approximate growth rate in your earnings over the next 12 months for each of the scenarios below?

Instructions: We start with your prediction for the most pessimistic scenario for your earning growth rate over the next 12 months (LOWEST growth rate) and end with your most optimistic prediction (HIGHEST growth rate).

The LOWEST growth rate in your earnings would be about: _a_% [RANGE: -50 to 50]
The MEDIUM growth rate in your earnings would be about: _b_% [RANGE: -50 to 50]
The HIGHEST growth rate in your earnings would be about: _c_% [RANGE: -50 to 50]

[QUALTRICS] QUESTION 4.6B

Now we ask you to think about the chance of the growth rates you entered in the previous screen actually happening over the next 12 months.

Please assign a percentage chance to each growth rate to indicate how likely you think it is that this growth rate will actually happen to your earnings over the next 12 months.

Instruction: Your answers can range from 0 to 100, where 0 means there is absolutely no chance that this growth rate will happen, and 100 means that it is absolutely certain that this growth rate will happen. (Your answers should sum to 100 – if your sum exceeds 100, you should first decrease the points again in one option before you can add points in another).

LOWEST: The chance of a % growth rate in your earnings would be: __% [RANGE: 0-100]
MEDIUM: The chance of b % growth rate in your earnings would be: __% [RANGE: 0-100]
HIGHEST: The chance of c % growth rate in your earnings would be: __% [RANGE: 0-100]
Total [sum of values above]

[QUALTRICS] QUESTION 4.7

From October 2024 to October 2025, how much do you think that the average earnings of employees working in the same occupation with similar experience as you will change?

Slider bar with Range: -50 to 50

[QUALTRICS] QUESTION 4.8A

Imagine again that you were forced to leave your current job and that you had 3 months to **find a job at another employer in the same occupation**. What do you expect the overall pay to change compared to your current job under each of the scenarios below?

The LOWEST growth rate (most pessimistic): _a_% [RANGE: -50 to 50]
The MEDIUM growth rate (a typical prediction): _b_% [RANGE: -50 to 50]
The HIGHEST growth rate (most optimistic): _c_% [RANGE: -50 to 50]

[QUALTRICS] QUESTION 4.8B

Now we ask you to think about the chance of the growth rates you entered in the previous screen actually happening with your new job.

Please assign a percentage chance to each growth rate to indicate how likely you think it is that this growth rate will actually happen to your **overall pay at the new job**.

Instruction: Your answers can range from 0 to 100, where 0 means there is absolutely no chance that this growth rate will happen, and 100 means that it is absolutely certain that this growth rate will happen. (Your answers should sum to 100 – if your sum exceeds 100, you should first decrease the points again in one option before you can add points in another).

LOWEST: The chance of a % growth rate in your overall pay would be: __% [RANGE: 0-100]
MEDIUM: The chance of b % growth rate in your overall pay would be: __% [RANGE: 0-100]
HIGHEST: The chance of c % growth rate in your overall pay would be: __% [RANGE: 0-100]
Total [sum of values above]

[QUALTRICS] QUESTION 4.9

In your opinion, will there be more job opportunities in your city in the next year?

- Within your industry, but in a different occupation
- Within your occupation, but in a different industry
- In a different industry and a different occupation
- Within your industry and occupation

[QUALTRICS] QUESTION 4.10

What are the main reasons for why you plan to stay at your current employer even though other employers may offer a higher wage? [select all that applies]

- I do not want to learn the ropes in a new job.
- I do not want to lose my current colleagues.
- I feel secure in my current job and am concerned that a new job would be riskier.
- I lack information on where to find new job opportunities.
- I do not have sufficient access to training resources matching the new positions.
- I face challenges of long commuting distance.
- I do not find many local job opportunities that match my qualifications.
- I lack the time or resources to gain new skills.
- I am unwilling or uncomfortable with change.
- Others

[QUALTRICS] QUESTION 4.11

Imagine that you received a job offer with a 30% higher wage from another employer and that the job is otherwise identical to your current job. By how much are you willing to increase your commute time?

- Not at all
- I'm willing to increase my commute time by ____ minutes

Section 4C. For Unemployed (Section 2.2C)

QUESTION 4.12

And looking at the more immediate future, what do you think is the percent chance that within the coming months, you will find a [INSERT full-time IF Q2.1A=YES] job that you will accept, considering the pay and type of work?

Please use the slider below, where 0% means "Absolutely no chance" and 100% means "Absolutely certain".

Coming 3 months

Coming 12 months

QUESTION 4.13 [RESERVATION WAGE]

Suppose someone offered you a job today. What is the lowest wage or salary you would accept (BEFORE taxes and deductions) for the type of work you are looking for? [Range: 0 - 999,999]
Please choose one of the following.
$_____ per month

Section 4D. For not in the labor force (Section 2.2D)

QUESTION 4.15

What do you think is the percent chance that you will look for job opportunities within the coming months?

3 months
12 months

Please use the slider below, where 0% means "Absolutely no chance" and 100% means "Absolutely certain".

[QUALTRICS] QUESTION 4.16

[If Question 4.15 > 0]
Are you currently taking or planning to take additional trainings in preparation for potential job search within the coming 12 months?
Yes
No

Section 5A Industry, Occupation, Skills

QUESTION 5.1 BROAD INDUSTRY

In which of the following industries is your [If Q2.1 = 1 or 2, insert 'current'; If Q2.1=4, insert 'last'; If Q2.1 = 3, 4 or 5, and not Q2.1 =1 and not Q2.1 =2, insert 'desired'] job?

1. Agriculture or Mining
2. Construction, transportation, or warehousing
3. Utilities (e.g. electricity power generation or distribution, natural gas distribution)
4. Manufacturing
5. Services

QUESTION 5.2 FINER INDUSTRY

[If Q5.1 = Agriculture or Mining]

1. Agriculture
2. Mining
3. Other, please specify

[If Q5.1 = Construction, transportation and warehousing]

1. Construction
2. Transportation
3. Warehousing and storage
4. Others, please specify

[If Q5.1 = Utilities]

1. Fossil fuel electric power generation
2. Solar, wind, hydroelectric, geothermal, or other renewable power generation
3. electric power transmission or distribution
4. Other, please specify

[If Q5.1 = Manufacturing]

1. Automobile production
2. Iron and steel production
3. Cement production
4. Chemical production
5. Plastics production
6. Pulp and paper production
7. Food and beverages production
8. Textile production
9. Other manufacturing, please specify

[If Q5.1 = Services]

1. Wholesale and retail trade
2. IT, finance, real estate, management, and other professional services
3. Health care and education services
4. Food, accommodation and administrative services
5. Other services, please specify

Question 5.2 Occupation Description

Briefly describe your duties in your main job (whether full time or part time). Please be specific in describing your occupation: e.g. software engineer, First-line supervisors of production and operating workers, hotel desk clerk, etc. Please be as specific as possible instead of listing general categories such as "Business" or "Services".

[Open text box question]

Section 5B. Demographics

Q1A. What is the size of your current employer (if Q2.1==1 or 2)

1. Less than 10 employees
2. 10 – 100 employees
3. 101 – 500 employees
4. More than 500 employees

Q1B. How many years have you been working for your current industry (if Q2.1==1 or 2)

Q2. Which category represents the total combined pre-tax income of all members of your household (including you) during the past 12 months?

5. Less than $10,000
6. $10,000 to $19,999
7. $20,000 to $29,999
8. $30,000 to $39,999
9. $40,000 to $49,999
10. $50,000 to $59,999
11. $60,000 to $74,999
12. $75,000 to $99,999
13. $100,000 to $149,999
14. $150,000 to $199,999
15. $200,000 or more

Q4. What is your gender?

1. Male
2. Female
3. Other
4. Prefer not to answer

Q5. Which year were you born?

Q6. What is the highest level of school you have completed, or the highest degree you have received?

1. Less than high school
2. High school diploma
3. Some college but no degree
4. Bachelor's Degree or higher

Q6A. [If Q6 = 3 or 4] What is your major in the highest level of school you have completed, or the highest degree you have received? Please select all that apply.

1. business
2. health professions and related programs

3. social sciences and history
4. biological and biomedical sciences
5. psychology
6. engineering
7. computer science
8. communications
9. government/political science
10. mathematics
11. Other, please specify

Q7. How would you identify your ethnicity?

Please select all that apply.

1. Asian/Asian American
2. Black/African American
3. White/Caucasian
4. Other
5. Prefer not to say

Q7A. Do you consider yourself of Hispanic, Latino or Spanish origin?

1. Yes
2. No

Q8. How likely will you support a climate policy in general targeted to address issues related climate change?

Slider bar from 0 to 100

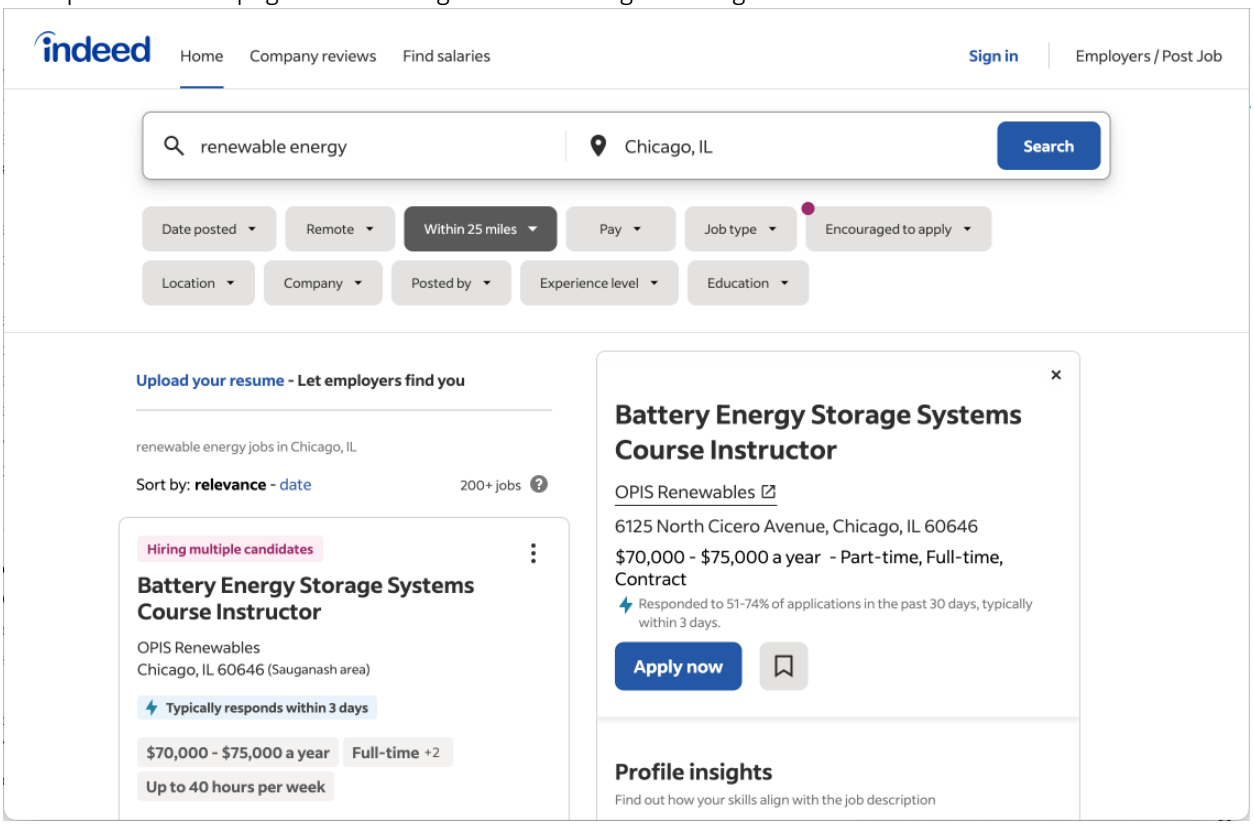
[Qualtrics] Final page

You have finished all the questions. You may now exit the survey. Below are some links to some clean energy-related job information in your city if you would like to explore:

Link to job adds [record their action]

1. Renewable Energy-related Job Postings
2. General jobs in Your City

Example of the webpage after clicking the link if living in Chicago area:



[Prolific] Follow-up survey

Section 1

[This subsection applies to ALL respondent]

QUESTION 1

In the past week, how much time did you spend on general job search?

Number of hours spent on job search: _____ [Range: 0 to 168]

QUESTION 2

In the past week, did you search for any information related to the clean energy transition?

QUESTION 3

In the past week, did you search for renewable energy related job openings?

Section 2.2 Labor market outlook

Section 2.2A Aggregate labor market outlook

[This subsection applies to ALL respondent]

QUESTION 2.2

Over the next 12 months, how much do you think that the average earnings in your city will change? [Range: -100 to 100]

4. increased by [ ]%
5. No change
6. decreased by [ ]%

QUESTION 2.3

Over the next 12 months, do you think that the average earnings of employees in automobile and power generation related industries will increase or decrease? [Range: -100 to 100]

4. increased by [ ]%
5. No change
6. decreased by [ ]%

Section 2.2B Current employment outlook

[This subsection only applies to employed: wave 1 Q2.1 = 1 or 2]

QUESTION 2.6

Please think about your possible relationship with your current employer of your main job during the next 12 months. Assign the probability in each possible case. The sum of the probabilities should be 100.

5. Staying with the current employer during the next 12 months
6. Laid-off from current employer at some point during the next 12 months
7. Quit from the current employer at some point during the next 12 months
8. Separation for other reasons during the next 12 months

QUESTION 2.8

[If Question 2.6 Staying with the current employer > 0]

Suppose again that, 12 months from now, you are working in the exact same job at the same place you currently work with the exact same number of hours.

Please give your best guess about the lowest earnings growth rate and the highest earnings growth rate.

QUESTION 2.8A

What do you think the lowest growth rate of your earnings will be over the next 12 months?

Slider with range from -50% to 50%

QUESTION 2.8B

What do you think the highest growth rate of your earnings will be over the next 12 months?

Slider with range from -50% to 50%

QUESTION 2.8C

What do you think is the percentage chance that the growth rate of your earnings over the next 12 months will be greater than (Q2.8A + Q2.8B)/2 %?

Slider with range from 0% to 100%

Section 3

Question 3.1

Have you heard or read about the federal law called the "Inflation Reduction Act of 2022" (also known as the "IRA"), a bill that was passed by the U.S. Congress?

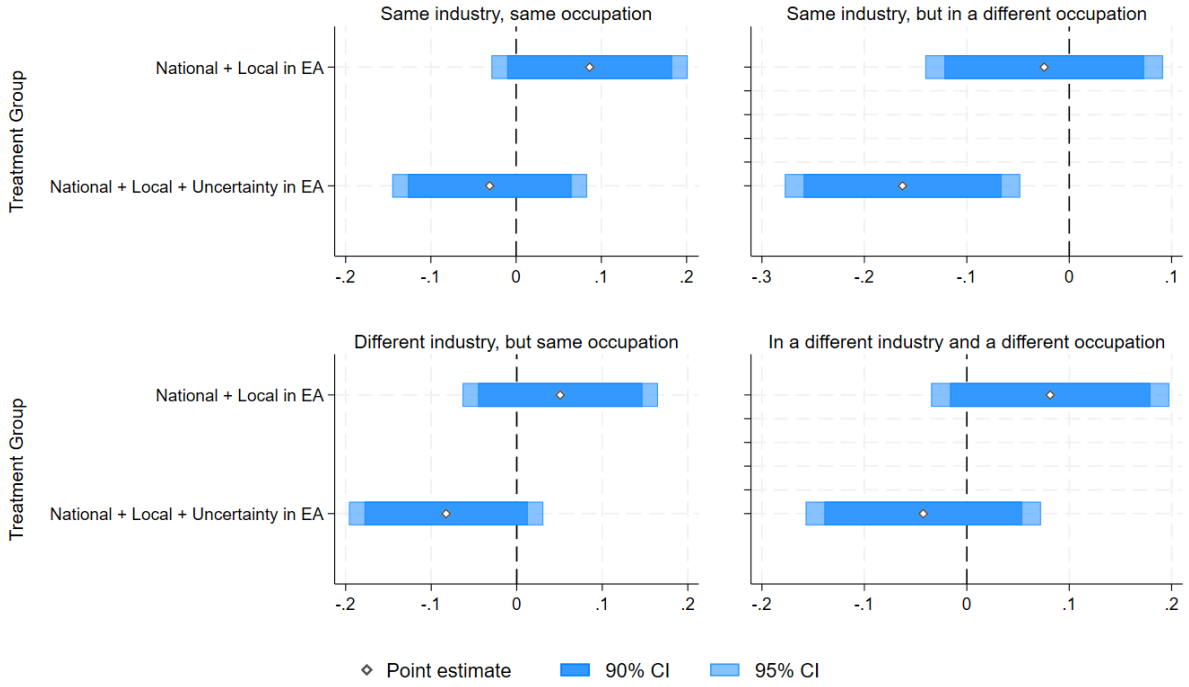
5. A little
6. Some
7. A lot
8. Nothing at all

[If Q3.1 NOT= "Nothing at all"]

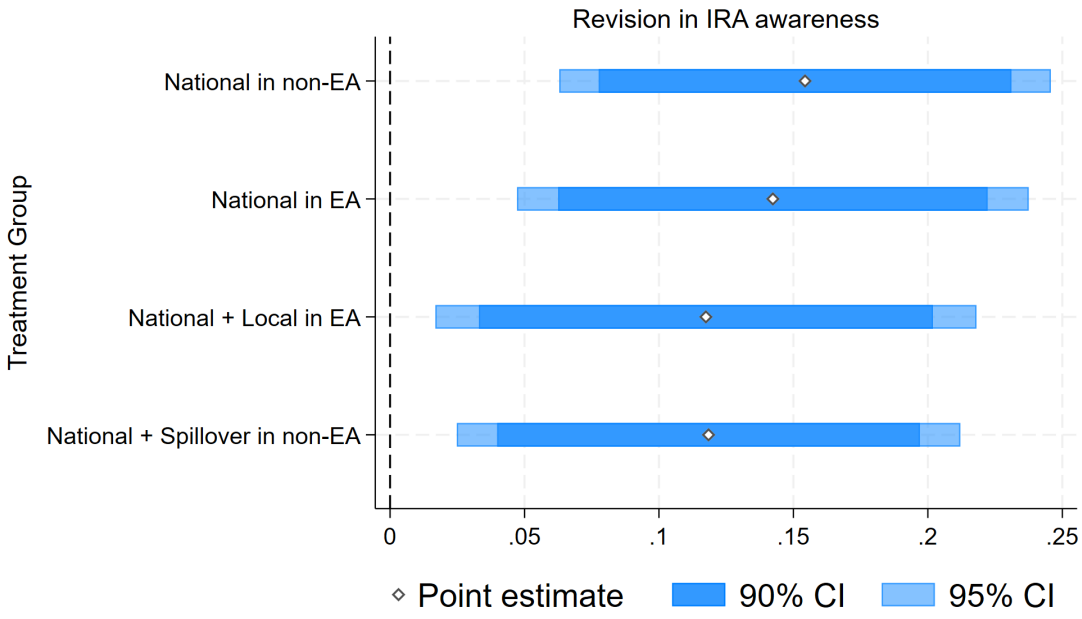
Question 3.2

What, if anything, that comes to mind when you think about the Inflation Reduction Act of 2022? [Open text]

Appendix C Additional Results

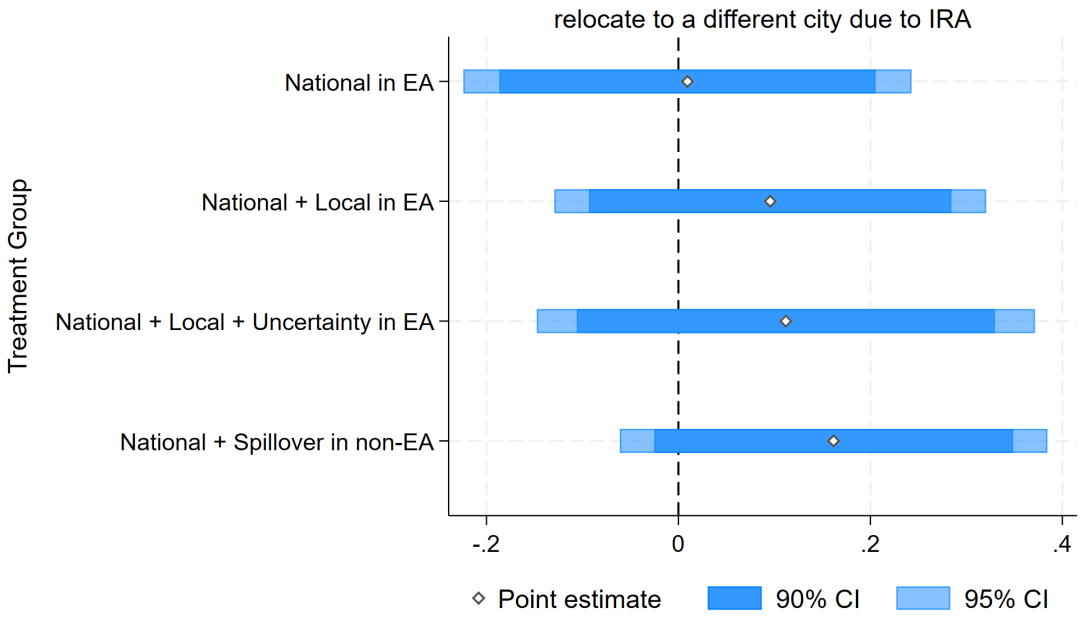


Appendix Figure C.1: QUALTRICS, WE ONLY ASK EMPLOYED: "IN YOUR OPINION, WILL THERE BE MORE JOB OPPORTUNITIES IN YOUR CITY IN THE NEXT YEAR?"

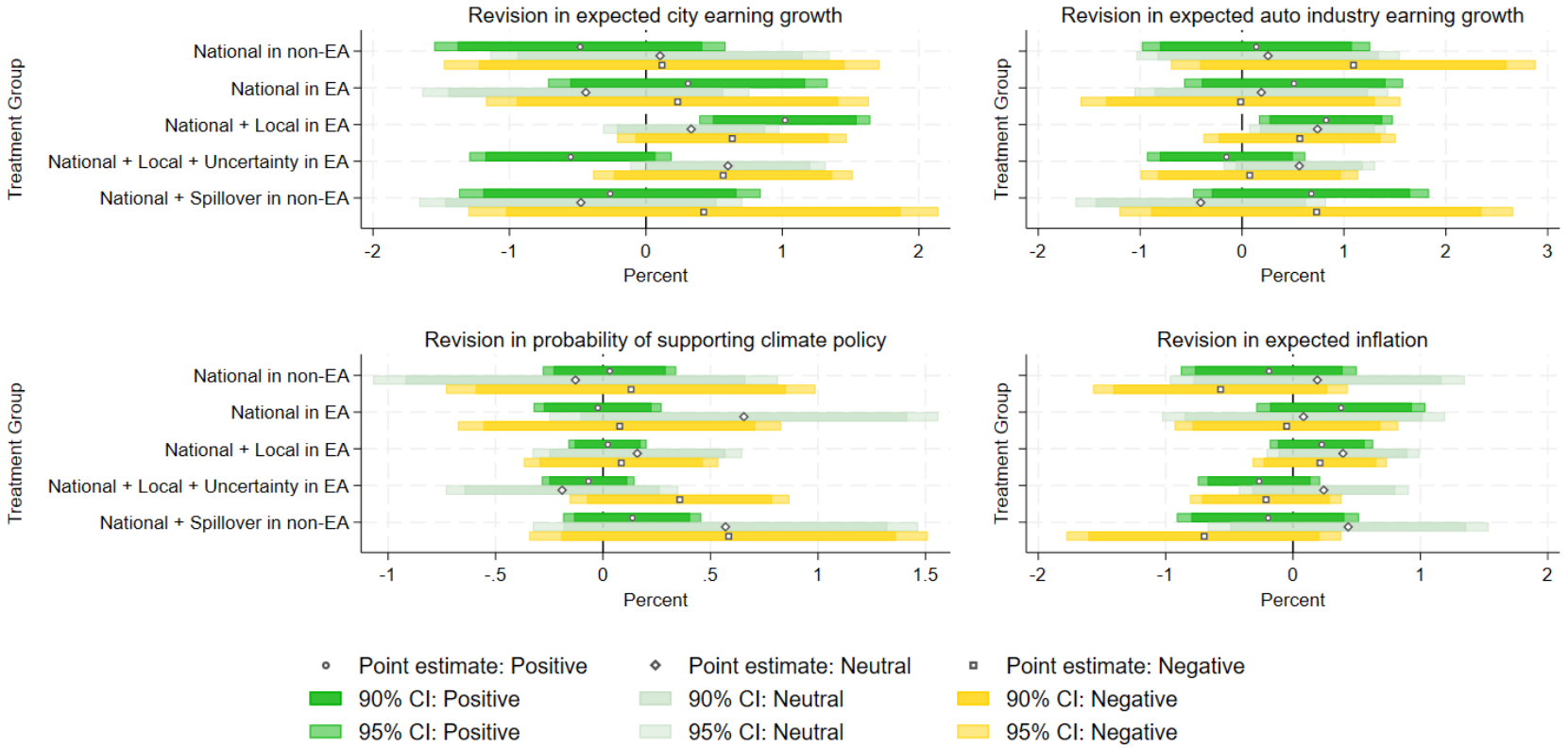


Appendix Figure C.2: AVERAGE TREATMENT EFFECTS ON IRA AWARENESS

Note. The figure plots the treatment coefficients from an OLS regression based on equation (1), along with their 90% and 95% confidence intervals. IRA awareness is measured on a four-point scale: 0 (“not at all"), 1 (“a little"), 2 (“some"), and 3 (“a lot"). The dependent variable is the change in IRA awareness between the pre-treatment and the follow-up survey.

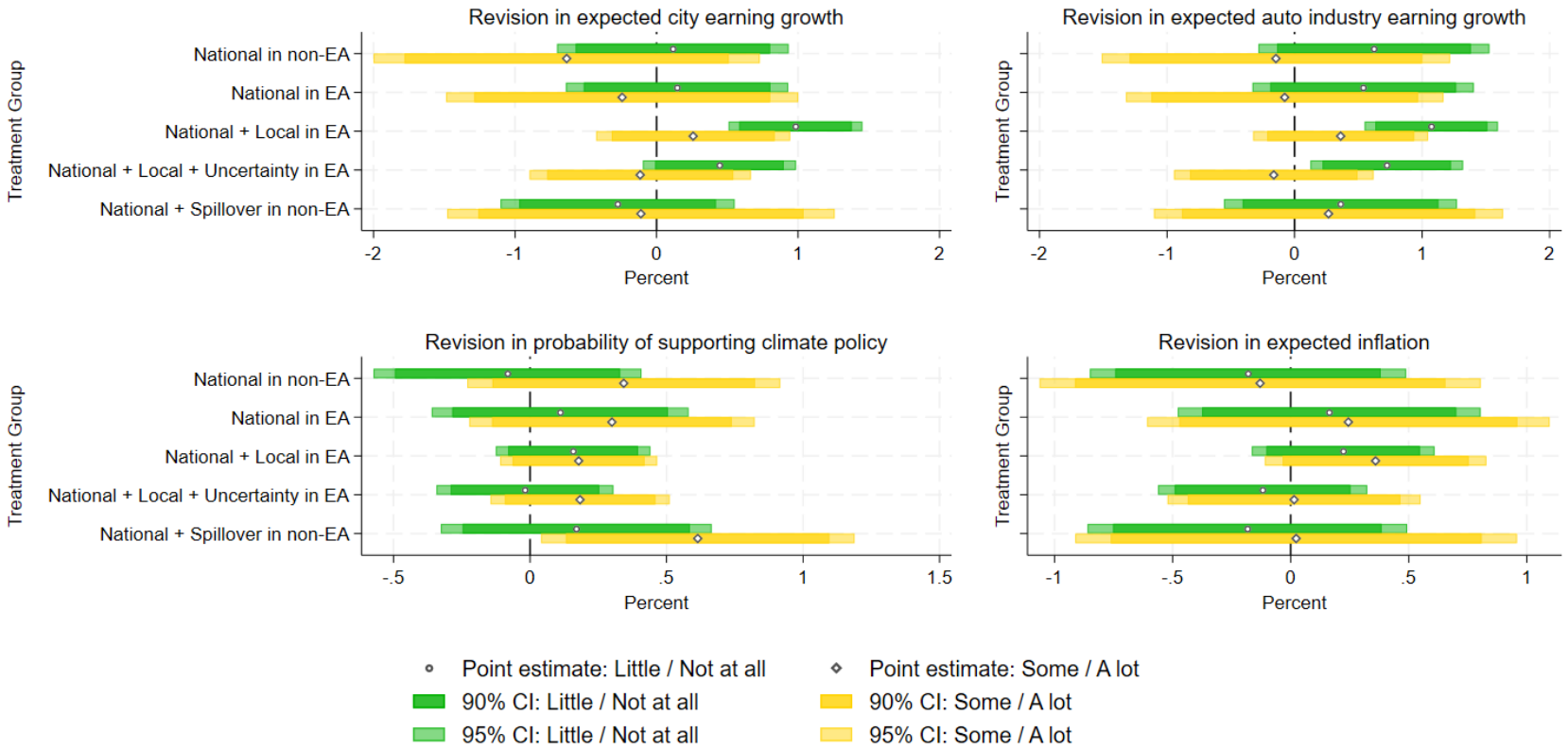


Appendix Figure C.3: RELOCATION DECISION, BASELINE IS "NATIONAL IN NON-EA"



Appendix Figure C.4: AVERAGE TREATMENT EFFECTS BY VIEWS ON ENERGY TRANSITION

Note. The figure plots the treatment coefficients along with the 90% and 95% confidence intervals using regression equation (1). The dependent variables are the expected 12-month-ahead city earnings growth, expected 12-month-ahead auto industry earnings growth, probability of supporting climate change policy, and expected 12-month inflation, respectively. Regressions are estimated separately using subgroups based on their perception of the energy transition. Results are based on Huber-robust estimates.



Appendix Figure C.5: AVERAGE TREATMENT EFFECTS BY PRE-TREATMENT IRA KNOWLEDGE

Note. The figure plots the treatment coefficients along with the 90% and 95% confidence intervals using regression equation (1). The dependent variables are the expected 12-month-ahead city earnings growth, expected 12-month-ahead auto industry earnings growth, probability of supporting climate change policy, and expected 12-month inflation, respectively. Regressions are estimated separately using subgroups based on their awareness of IRA. Results are based on Huber-robust estimates.