



JLCCCP August 29 Informational Hearing:

Maximizing and Implementing the Inflation Reduction Act: California's \$180 Billion Dollar Climate Funding Challenge

BACKGROUND INFORMATION

SECTION I: WHAT IS THE INFLATION REDUCTION ACT? WHAT'S IN IT?

- The Inflation Reduction Act.*** The Inflation Reduction Act was signed into law by President Biden one year ago, in August 2022. The law has driven hundreds of billions of dollars of investment in clean energy and manufacturing in the United States. The programs and opportunities of the Inflation Reduction Act (hereafter referred to as the IRA) are key mechanisms, **but not panaceas**, in California's transformation to a carbon-neutral economy. Alongside the IRA, the Infrastructure Investment and Jobs Act (IIJA) and the CHIPS and Science Act all combine to create foundational industrial policy to spur domestic manufacturing in clean energy technology that can deploy low-carbon solutions at scale. In July 2023, Gov. Newsom signed a number of bills to accelerate critical infrastructure projects across California that help build our 100% clean electric grid and accelerate IRA project deployment. The efforts aimed to take full advantage of an unprecedented \$180 billion in state, local, and federal infrastructure funds over the next ten years – critical to achieving California's world-leading climate and clean energy goals while also creating up to 400,000 good-paying jobs.¹ This \$180 billion is just a starting point for the amount needed for resilient, carbon-neutral infrastructure.
- How will the IRA invest funds in reducing emissions?*** There are many components of the IRA, but the climate provisions provide an approximate \$437 billion in investments across 125

¹ "Governor Newsom Signs Infrastructure & Budget Legislation to Build More, Faster" July 10, 2023 (press release), available at: <https://www.gov.ca.gov/2023/07/10/governor-newsom-signs-infrastructure-budget-legislation-to-build-more-faster/>

programs in legislation.² The categories that this funding would go towards span an array of categories from clean energy technology to air pollution, to energy efficiency and community resilience. Through the use of tax credits, loans, rebates and direct federal spending, the IRA consists of **125 programs**, 66 of which are new or contain new components. Many of these programs are still being determined. Federal agencies are still in the process of publishing guidelines, rules, and subsequent regulatory frameworks. While many of these programs will launch in 2024, many of the key initiatives of the IRA are underway or based on private sector project development.

- a. **Tax Credits:** While experts project \$437 billion in climate investments from the IRA, this number will ultimately depend on the final value of refundable and non-refundable tax credits. Much of the conversation has been about the **consumer tax credits** for purchasing an electric vehicle³, installing energy efficient heat pumps⁴, or upgrading home electricity panels.⁵ More than **\$582 million** is anticipated to be allocated to California for the whole-house Homeowner Managing Energy Savings (HOMES) rebate program and the point-of-sale High-Efficiency Electric Home Rebate (HEEHRA) program as early as 2024, and IRA funding will provide California contractor training grants related to training workers in installing efficient appliances.⁶ In some circles — such as with solar, wind, biomass, or hydrogen infrastructure developers — the conversation has centered around the **Clean Energy Production Tax Credit** and **Clean Energy Investment Tax Credit**, which replaces the traditional tax credits with versions that accelerate greenhouse gas reductions.⁷ The tax credits apply to all energy generation facilities (and energy storage systems) that have an anticipated greenhouse gas emissions rate of zero, and can provide incentives for projects on the verge of penciling out. The Production Tax Credits provide a rebate based on the amount of production of a particular product, and the Investment Tax Credit will generate credits to offset investments in clean infrastructure. The IRA allows **eligible entities** who may not have a federal tax burden, including state governments, to qualify for tax credit benefits via Direct Pay. **Direct Pay** means qualified entities (e.g., state or local governments) can receive up-front payments to be used as direct capital (rather than deductions or refunds through taxes). Public entities — including school districts, water districts, economic development agencies, public universities, public hospitals, and even some nonprofits — have the opportunity to fund a broad range of new, clean energy projects through claiming direct payments.

² The White House, *Inflation Reduction Act Guidebook*, available at

<https://www.whitehouse.gov/wp-content/uploads/2022/12/Inflation-Reduction-Act-Guidebook.pdf>.

³ Internal Revenue Service (IRS), “Credits for New Clean Vehicles Purchased in 2023 or After” (webpage), available at: <https://www.irs.gov/credits-deductions/credits-for-new-clean-vehicles-purchased-in-2023-or-after>.

⁴ U.S. Department of Energy, “Understanding Home Energy Rebates” (webpage), available at: <https://www.energy.gov/scep/home-energy-rebate-program>.

⁵ California Energy Commission, “Inflation Reduction Act Residential Energy Rebate Programs in California” (webpage), available at:

<https://www.energy.ca.gov/programs-and-topics/programs/inflation-reduction-act-residential-energy-rebate-programs-california>.

⁶ Id.

⁷ U.S. Environmental Protection Agency, “Summary of Inflation Reduction Act provisions related to renewable energy” (webpage), available at:

<https://www.epa.gov/green-power-markets/summary-inflation-reduction-act-provisions-related-renewable-energy>.

Topics for Consideration:

- Will the Governor’s Office of Business and Economic Development be the central nucleus for the Newsom administration (GO-Biz) when it comes to all tax credit and project submission questions?⁸
- How is California thinking about more than just large-scale electrical infrastructure (solar, offshore wind, electrolyzers) as a way to maximize the tax credits? What is the role for demand response⁹, energy efficiency, and virtual power plants?
- Is the state ensuring full transferability of investment and production tax credits to remain competitive in the renewable energy market?

b. Grants and Direct Allocations: A portion of the IRA funding is for direct grants and allocations. A minority of programs are entirely formula funding. Largely, the grant funds are disseminated via competitive bid processes. Below is a snapshot of some of the most well-known grant programs that will support climate action and capacity building in local communities.

- **Greenhouse Gas Reduction Fund:** The \$27 Billion Greenhouse Gas Reduction Fund (GGRF), is often referred to as the “National Green Bank,” and is both a grant and a loan program. The **grant** portion of the GGRF comprises different programs, but will fund states, cities, tribal governments, or nongovernmental entities to undertake infrastructure and organizational capacity building. Some money will be dispersed as a grant, but then operationalized as a loan that can help the grantee recover funds from projects that can ultimately generate revenue (e.g., funding a nonprofit to install rooftop solar). The GGRF is aligned with the **Justice40** initiative to direct a minimum of 40% of investment benefits to disadvantaged communities.¹⁰
- **The grant programs of the GGRF include:**
 - *The [National Clean Investment Fund](#)* is a \$14 billion program to fund two to three national nonprofits that will partner with private capital providers to deliver financing at scale to businesses, communities, community lenders, and others.
 - Timing: On July 14, 2023, EPA released the Notice of Funding Opportunity.
 - Application due: October 12, 2023
 - Expected deployment: Mid-2024 — Early-2025

⁸ Governor’s Office of Business and Economic Development, “Inflation Reduction Act Tax Credits for Industry, Developers, and Investment” (webpage), available at:

<https://static.business.ca.gov/industries/climate-and-clean-energy/inflation-reduction-act-tax-credit/>

⁹ Note: The California Energy Commission launched the Demand Side Grid Support (DSGS) program in 2022 to enable distributed resources like rooftop solar, battery storage and electric vehicles to send energy back to the grid when demand is at its highest. California currently has approximately 100,000 batteries linked to solar with a total capacity of about 1,000 megawatts of power.

¹⁰ The White House, “The Justice40 Initiative” (webpage), available at: <https://www.whitehouse.gov/environmentaljustice/justice40>.

- *The [Clean Communities Investment Accelerator](#)* is a \$6 billion program to fund two to seven hub nonprofits with the plans and capabilities to rapidly build the clean financing capacity of specific networks of public, quasi-public and non-profit community lenders.
 - Timing: On July 14, 2023, EPA released the Notice of Funding Opportunity.
 - Application due: October 12, 2023
 - Expected deployment: Mid-2024 — Early-2025
- *The [Solar for All](#)* program is a \$7 billion program to provide up to 60 grants to states, Tribal governments, municipalities, and nonprofits to expand the number of low-income and disadvantaged communities that are primed for residential and community solar investment.
 - Timing: On June 28, 2023, EPA released the Notice of Funding Opportunity.
 - Application due: September 26, 2023
 - Expected deployment: Early-2024 — Mid-2024

CASE STUDY: New York Providing Predevelopment Funding for Low and Moderate Income Solar + Storage Projects

California may look to provide upfront capital and resources to reach communities that have not been able to access clean energy. In New York, the State Energy Research and Development Authority (NYSERDA) is providing \$3.6 million for predevelopment and technical assistance for solar and storage installation.¹¹ The Affordable Solar Predevelopment and Technical Assistance solicitation is open continuously to all applicants who qualify, and seeks to address barriers to solar installations serving low-to-moderate income (LMI) households living in rental housing, multifamily buildings, or other households not served by traditional onsite residential solar. Predevelopment includes site identification, financial modeling, estimating equipment and installer expenses, customer outreach and enrollment, and other details about the scope of the project. Financing for predevelopment costs is usually not available to community-based organizations working to develop solar + storage to benefit LMI residents because these projects are considered risky by many commercial financing institutions.

- **Climate Pollution Reduction Grant Program:** The Climate Pollution Reduction Grants program will provide \$5 billion in grants to states, local governments, air pollution control agencies, or tribes to develop and implement plans for reducing both greenhouse gas emissions and other harmful air pollution. to support efforts by states, municipalities. This two-phase grant program provides funding of \$250 million for noncompetitive planning grants, and \$4.6 billion for competitive implementation grants.
- **Environmental and Climate Justice Program Block Grant:** This \$3 billion block grant to states will provide funding for financial and technical assistance to

¹¹ NYSERDA, Affordable Solar and Storage Predevelopment and Technical Assistance” (webpage), available at: https://portal.nyserdera.ny.gov/CORE_Solicitation_Detail_Page?SolicitationId=a0rt0000000QnFIAA0.

carry out activities to benefit underserved and overburdened communities.¹² In response, the Strategic Growth Council (SGC) has managed to procure \$2 million in advance funding from the state to hire a grant writer and begin outreach to all prior [Transformative Climate Communities](#) (TCC) grant program recipients and applicants. By leveraging existing relationships and data of past TCC grantees, SGC can do targeted outreach and coordination. The EPA application is expected to be released in the coming months.

Topics for Conversation:

- Can the Legislature help the Administration win competitive IRA grants? For example, the state has experienced challenges hiring professional grant writers. Would it make sense to provide more contracting flexibility, so agencies could spend less time overcoming bureaucratic hurdles and more time writing proposals?
- Since up to 20% of the funding for Climate Pollution Reduction Grants can be used by states for planning or technical assistance, what efforts should be undertaken to build local capacity? How can the state support community-based organizations in coordinating applications, program administration, and technology adoption? Are there lessons to be learned from programs aimed to help frontline communities, such as the Assembly Bill 617 Community Emissions Reduction Plans, the SGC Affordable Housing and Sustainable Communities program, or other California Climate Investment efforts? For example, can the Energy Commission look to the Solar On Multifamily Affordable Housing (SOMAH) program as a model for the Equitable Building Decarbonization program implementation?¹³
- How can the state look to leverage programs together to find multiple benefits? (e.g., Can the State work with local governments to receive planning dollars to design a municipal e-bike or transit pass system, and then use an implementation grant to assist widespread adoption?)

c. **Loans:** The Department of Energy’s **Loan Program Office (LPO)** can provide loan guarantees for large-scale energy infrastructure projects where the private sector may not be willing to take the risk.¹⁴ The LPO finances The IRA increased the loan capacity of LPO by \$250 billion, giving the office approximately \$400 billion in loan authority for catalytic renewable energy, clean transportation, and manufacturing technologies.¹⁵

- **Supporting the Bridge-to-Bankability:** LPO provides loans and loan guarantees to support the “bridge to bankability,” which is their terminology for

¹² Inflation Reduction Act Environmental and Climate Justice Program (Clean Air Act §138), available at: <https://www.epa.gov/inflation-reduction-act/advancing-environmental-justice>.

¹³ California Energy Commission, “Equitable Building Decarbonization Program” (webpage), available at: <https://www.energy.ca.gov/programs-and-topics/programs/equitable-building-decarbonization-program>.

¹⁴ U.S. Department of Energy, “Loan Programs Office” (webpage), available at: <https://www.energy.gov/lpo/loan-programs-office>.

¹⁵ Lisa Friedman and Brad Plummer, “A Swaggering Clean-Energy Pioneer, With \$400 Billion to Hand Out” *New York Times* (May 11, 2023), available at: <https://www.nytimes.com/2023/05/11/climate/jigar-shah-climate-biden.html>.

providing financing for clean technologies to reach full market acceptance.¹⁶ The LPO is accepting applications under its four loan programs: Title 17 Clean Energy Financing, the Advanced Technology Vehicles Manufacturing Loan Program, Tribal Energy Financing Program, and Carbon Dioxide Transportation Infrastructure. The LPO has the capacity to offer loan guarantees **up to 80 percent of eligible project costs** for innovative energy projects. Furthermore, the LPO has released guidance on their State Energy Financing Institution (SEFI) program as part of the Title 17 Clean Energy Financing Program. A SEFI is an entity established by a state or tribal entity to provide financing support or credit enhancements for eligible clean energy projects and to take steps to reduce financial barriers to the deployment of eligible clean energy projects.¹⁷

- **Unfortunately, California is behind the curve for getting large-scale projects in the LPO pipeline:** The LPO is always open to receive applications. Therefore, the state can track progress in getting projects in the pipeline. While there are some projects currently in Phase II of the LPO application, it is critical that California take the appropriate steps to support projects that want to apply to LPO for loan financing. In the instance of energy efficiency and demand response, the LPO has made conditional commitments upwards of \$3.3 billion to support deployment of demand flexibility to relieve strained grids in other parts of the country.¹⁸ The application process through conditional commitment commonly takes up to a year. However, it can move faster or slower depending on applicant readiness with required materials.

Topic for Consideration:

- Would it make sense for the Legislature to provide GO-Biz with more funding to support Technical Assistance to help qualified and vetted developers get domestic manufacturing provisions? While permitting reform continues to help provide predictability, providing technical assistance and predevelopment support can help projects overcome obstacles.
- Who should be creating SEFIs? Should there be multiple SEFIs at GO-Biz, the Energy Commission, and the California Infrastructure and Economic Development Bank (IBank) to best assist projects into the pipeline?
- Can the state provide matching funds dedicated to helping projects get into the LPO pipeline, which can help waive LPO innovation requirements?¹⁹

¹⁶ U.S. Department of Energy, “Building a Bridge to Bankability” (November 2022) (presentation), available at: https://www.energy.gov/sites/default/files/2023-01/DOE-LPO22-PPTv03_LPO-Overview_Nov22.pdf.

¹⁷ U.S. Department of Energy, “LPO Outlines State Energy Financing Institution (SEFI) Opportunities and How State Organizations Can Become SEFIs” (July 18, 2023) (webpage), available at: <https://www.energy.gov/lpo/articles/lpo-outlines-state-energy-financing-institution-sefi-opportunities-and-how-state>.

¹⁸ U.S. Department of Energy, “LPO Offers First Conditional Commitment for a Virtual Power Plant to Sunnova’s Project Hestia to Support Grid Reliability and Expand Clean Energy Access” (April 20, 2023) (press release), available at: <https://www.smart-energy.com/regional-news/north-america/doe-offers-3bn-loan-to-create-solar-and-storage-vpps/>.

¹⁹ For reference to the U.S. Dept. of Energy LPO Project Requirements, see Title 17 Clean Energy Financing, available at: <https://www.energy.gov/lpo/title-17-clean-energy-financing>.

- d. **Labor Standards:** The IRA’s primary inclusion of labor standards beyond current federal standards are contained in the tax credit and loan programs. The two primary labor standards extended by the IRA are **Prevailing Wage** and **Apprenticeship** requirements²⁰. Pursuant to the Davis-Bacon Act, federally funded project projects are required to pay prevailing wages. State law goes further in requiring prevailing wages on public works projects meaning that the vast majority of projects through the IRA’s grant-funded and Direct Pay programs will be subject to prevailing wage requirements. The IRA also creates incentives in programs that don’t use direct public funding, such as tax credit and loan programs, to encourage prevailing wages in the deployment of that funding. California has established **apprenticeship** requirements for IRA-supported projects and expanded apprenticeships through “skilled and trained” workforce requirements.²¹

SECTION II. WHAT HAS CALIFORNIA DONE TO GET READY FOR THE IRA?

3. **The Legislature has taken multiple steps to prepare for this influx in funds.** As the Legislative Analyst’s Office will present, the Legislature passed a number of bills to support accelerated deployment of clean energy technologies (i.e., SB [124](#), [147](#), [149](#), [150](#)). Additionally, a number of pending bills will address the state’s energy infrastructure with the goal of providing more certainty to developers (i.e., AB [914](#), SB [420](#), SB [619](#)) .
4. **Interagency coordination and internal capacity building is a critical step that takes time.** As the Newsom administration will present, there have been dozens of new initiatives undertaken by various agencies to prepare for the massive influx of federal funds from IJIA, CHIPS and Science Act, and IRA. To coordinate energy infrastructure deployment, the administration established the Tracking Energy Development Task Force for the Public Utilities Commission, Energy Commission, Independent System Operator and GO-Biz to track new energy projects under development.²² In Spring 2023, Governor Newsom and the administration released numerous plans that will guide infrastructure investments, including the Independent System Operator’s 2022-2023 Transmission Plan which laid out 46 priority transmission projects.²³ The first public workshop for the Climate Pollution Reduction Grant Program highlighted the deep coordination between 18 agencies, boards, and commissions. ²⁴

²⁰ US Department of Labor, “Prevailing Wage and the Inflation Reduction Act” (website), available at: <https://www.dol.gov/agencies/whd/IRA>.

²¹UC Berkeley Labor Center, Report to Senate Budget Committee on Federal Investments, available at: <https://sbud.senate.ca.gov/sites/sbud.senate.ca.gov/files/Federal%20Research%20on%20IJIA%20IRA%20and%20CHIPS%20Final.pdf>.

²² CPUC, “Tracking Energy Development Task Force” (webpage), available at: <https://www.cpuc.ca.gov/news-and-updates/newsroom/summer-2021-reliability/tracking-energy-development>.

²³ California Independent System Operator (CAISO), “CAISO 2022-2023 Transmission Plan” (2023), available at: <http://www.caiso.com/InitiativeDocuments/Draft-2022-2023-Transmission-Plan.pdf>.

²⁴ California Air Resources Board, “Climate Pollution Reduction Grant Workshop Slidedeck,” August 2023 (presentation), available at: https://ww2.arb.ca.gov/sites/default/files/2023-08/CPRG%20Deck_Aug%2023%202023.pdf.

5. ***Developing high road jobs and maximizing community benefits will build strong careers for Californians.*** In 2021, there were already 505,083 California workers employed in clean energy jobs.²⁵ Over the next decade, that number could triple to more than 1.5 million.²⁶ Continuing to support the growth of high-quality clean energy jobs will in turn create the strong middle class of Californians for the next generation.

Topics for Consideration:

- How do we build modern transmission capacity to accommodate the shifting clean energy generation portfolio? What is the role of the legislature in supporting “Grid Enhancing Technologies,” which can unlock flexibility on the existing transmission infrastructure without costly and years-long infrastructure projects?²⁷ Of note, national experts worry that over 80% of the potential emissions reductions delivered by the IRA could be lost if transmission expansion is constrained to 1%/year, and roughly 25% could be lost if growth is limited to 1.5%/year.²⁸
- Could central energy procurement help facilitate more clarity for IRA-enabled projects? Would a move away from electric utilities procurement and the current Resource Adequacy model be more conducive to leverage IRA funds, and could it lead to more targeted job growth in disadvantaged communities?

SECTION III. WHAT ARE QUESTIONS WE NEED TO ANSWER IN 2024?

6. ***Meeting Our 2030 Obligations:*** In March 2023, the JLCCCP met to hear from the leadership of the California Air Resources Board on how the state can meet its statutory obligations under Senate Bill 32 to achieve a 40% reduction of GHG emissions below 1990 levels. In a July 2023 workshop, California Air Resources Board staff indicated that achieving the 2030 emissions reduction obligation would “necessitate several extraordinary feats”²⁹ This hearing on the IRA’s potential aims to show that IRA-enabled clean energy infrastructure needs to be accelerated to support state climate obligations. The IRA and energy infrastructure permitting agencies will be critical components to whether the state meets 2030 climate and clean air mandates. Clean energy generation, transmission, distribution, or storage projects have the ability to decarbonize the

²⁵ The White House, “The Inflation Reduction Act Delivers Affordable Clean Energy for California”, Available at: <https://www.whitehouse.gov/wp-content/uploads/2022/08/California.pdf>

²⁶ Rachel Sederberg, “Green Jobs Now: California” Working Nation (July 2023), available at:

https://workingnation.com/wp-content/uploads/2023/07/Green_Jobs_Now_California_WorkingNation.pdf

²⁷ James Hewett, “Embracing Innovation: Transforming the Grid for a Sustainable Future” *Breakthrough Energy* (June 1, 2023), available at: <https://breakthroughenergy.org/news/gridinnovation/>.

²⁸ Jesse D. Jenkins et al, “Electricity Transmission is Key to Unlock the Full Potential of the Inflation Reduction Act” (website), September 2022 available at:

https://repeatproject.org/docs/REPEAT_IRA_Transmission_2022-09-22.pdf.

²⁹ Ari Plachta, “California’s ambitious 2030 climate target faces serious obstacles, regulator acknowledges” *Sacramento Bee*, August 1, 2023, available at:

<https://www.sacbee.com/news/politics-government/capitol-alert/article277730683.html>; *see also*, California Air Resources Board “July 27, 2023 Cap-and-Trade Program Workshop” (presentation), available at: https://ww2.arb.ca.gov/sites/default/files/2023-07/nc-CapTradeWorkshop_July272023_0.pdf.

state's electricity sector, all while supporting zero-emission electric cars, delivery vans, and trucks. However, all of these electricity projects still must be approved, permitted, sited, built, interconnected, and finally integrated into the electrical grid. This will require diligent dedication from the state's energy agencies, electric utilities, and local governments.

7. Does the State Need a Comprehensive Roadmap that Incorporates the Impact of the IRA? The IRA touches every aspect of the economy: how the state powers itself, how we move, how we move goods, how we dispose of our waste, how we remedy historical environmental injustices, and how we deal with the climate impacts already here today. The 2022 Scoping Plan was well into development before the passage of the IRA. With all of these potential investments, would an addendum to the Scoping Plan be useful? Would an investment plan or business plan that projected California's clean energy infrastructure buildout be useful? Will the next Integrated Resource Planning documents coming out of the Energy Commission integrate the IRA, as Michigan's DTE utility integrated for their 2023 edition?³⁰ For example, a statewide climate investment plan roadmap could cover the following topics:

- Zero-Emission Vehicles (ZEVs) and Vehicle-to-Grid (V2G)
- Medium- and Heavy-Duty ZEV Deployment
- Energy (Clean Transmission, Generation, Distribution, and Storage)
 - Sector-Based Investments (e.g., offshore wind, electrolytic hydrogen)
 - Expedited Interconnection
- Water and Drought
- Wildfire and Forest Resilience
- Nature-Based Activities and Extreme Heat
- Community, Urban, and Coastal Resilience
- Sustainable Agriculture, Circular Economy, and other Methane reductions to meet California's SB 1383 requirements

8. Conclusion: As the federal government starts to administer state-level and locally-accessible programs in 2024 for energy efficiency, transportation electrification, building decarbonization, clean energy generation, energy storage, urban greening, and air pollution reduction, **is California ready to seize the opportunity?** A potential 2024 Climate Bond could help raise \$2 billion to support deploying clean energy and zero-emission transportation infrastructure that would accelerate greenhouse gas reductions throughout the state in the energy, transportation, and building sectors.³¹ But that would be a small down payment towards a larger overall portfolio of investments. The state should challenge itself to raise **\$180 billion for climate infrastructure** over the next decade to accelerate the clean energy transition in the face of the climate crisis.

³⁰ RMI, "What Happens When Utilities Start to Integrate the IRA into Planning?" (January 26, 2023) (blog), available at: <https://rmi.org/what-happens-when-utilities-start-to-integrate-the-ira-into-planning/>.

³¹ See generally, Senate Bill 867 (Allen, 2023), Assembly Bill 1567 (Garcia, 2023), Assembly Bill 408 (Wilson, 2023).

Appendix 1: Resources

Bibliography of State Inflation Reduction Act and Related Climate Infrastructure Resources:

- California Legislative Analyst Office, *2023 Analysis of 2023-2024 Budget: Crafting Climate, Resources, and Environmental Budget Solutions* (February 2023), available at: <https://lao.ca.gov/Publications/Report/4692>.
- California Legislative Analyst Office, *The 2023-24 Budget: Crafting Climate, Resources, And Environmental Budget Solutions* (March 2023) (presentation), available at: <https://sbud.senate.ca.gov/sites/sbud.senate.ca.gov/files/LAO%20-%20PowerPoint%20-%20Senate%20Sub%20%20030223.pdf>.
- California Office of Planning and Research (OPR), “Federal Grants” (webpage), available at: <https://opr.ca.gov/sch/federal-grants/>.
- Governor Newsom, May 2023, *Building The Electricity Grid Of The Future: California’s Clean Energy Transition Plan*, available at: <https://www.gov.ca.gov/wp-content/uploads/2023/05/CAEnergyTransitionPlan.pdf>.
- California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*” (November 2022), available at: <https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp.pdf>
- The White House, *Inflation Reduction Act for California*, (August 2022), available at: <https://www.whitehouse.gov/wp-content/uploads/2022/08/California.pdf>.
- California Energy Commission, “Inflation Reduction Act Impacts for Residential Energy Rebates Programs” (webpage), available at: <https://www.energy.ca.gov/programs-and-topics/programs/inflation-reduction-act-residential-energy-rebate-programs-california>.
- California Independent System Operator (CAISO), “CAISO 2022-2023 Transmission Plan” (2023), available at: <http://www.caiso.com/InitiativeDocuments/Draft-2022-2023-Transmission-Plan.pdf>.

Academic and Other Federal Resources for Inflation Reduction Act Opportunities:

- The White House, *Inflation Reduction Guidebook*, available at: <https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/>.
- The White House, “Invest.gov interactive map showing the public and private sector investments,” (webpage), available at: https://www.whitehouse.gov/invest/?utm_source=invest.gov.
- The White House, “Open Funding Opportunities | Clean Energy” (webpage), available at: <https://www.whitehouse.gov/cleanenergy/open-funding-opportunities/>.
- The White House, *Inflation Reduction Act Tribal Guidebook*, available at: <https://www.whitehouse.gov/wp-content/uploads/2023/04/Inflation-Reduction-Act-Tribal-Guidebook.pdf>.
- Adam Kent, “On IRA’s 1-year Anniversary, Toasting a Game-Changing Finance Program” (August 16, 2023), available at: <https://www.nrdc.org/bio/adam-kent/iras-1-year-anniversary-toasting-game-changing-finance-program>.
- Atlas Group, “Climate Program Portal” (webpage), available at: <https://climateprogramportal.org/dashboards/>
- Rhodium Group, *A Turning Point for US Climate Progress: Assessing the Climate and Clean Energy Provisions in the Inflation Reduction Act*, (August 12, 2022), available at: <https://rhg.com/research/climate-clean-energy-inflation-reduction-act>.
- BlueGreen Alliance, “Fact Sheet: Clean Energy Tax Credits in the Inflation Reduction Act,” August 24, 2022, available at: <https://www.bluegreenalliance.org/resources/fact-sheetclean-energy-tax-credits-in-the-inflation-reduction-act/>.

- BlueGreen Alliance, “Fact Sheet: Inflation Reduction Act and Bipartisan Infrastructure Law: Investments in Energy Communities” (April 2023), available at: <https://www.bluegreenalliance.org/wp-content/uploads/2023/04/Energy-Communities-Fact-Sheet-vFinal.pdf>
- Climate Power U.S., One Year of Our Clean Energy Boom, (July 2023), available at: <https://climatepower.us/wp-content/uploads/sites/23/2023/07/Clean-Energy-Boom-Anniversary-Report-1.pdf>
- Energy Innovation, LLC, “Implementing the IRA Series” (blog posts), available at: <https://energyinnovation.org/publication/implementing-inflation-reduction-act/>.
- Louise Bedsworth, et al., Funding San Francisco Climate Action, UC Berkeley CLEE (November 2022), available at: <https://www.law.berkeley.edu/wp-content/uploads/2022/11/Funding-San-Francisco-Climate-Action-Nov-2022.pdf>
- Jesse Jenkins, “Electricity Transmission is Key to Unlock the Full Potential of the Inflation Reduction Act,” Princeton University (presentation), available at: https://repeatproject.org/docs/REPEAT_IRA_Transmission_2022-09-22.pdf.
- Policylink, “IRA and Infrastructure Standards,” (webpage) available at: <https://www.policylink.org/infrastructure-standards>
- UC Berkeley Labor Center, Report on Federal Funding Opportunities for Climate and Infrastructure (2022), available at: <https://sbud.senate.ca.gov/sites/sbud.senate.ca.gov/files/Federal%20Research%20on%20IIJA%20IRA%20and%20CHIPS%20Final.pdf>.
- Amy Turner, “Proposed Regulations for Direct Pay Under the Inflation Reduction Act: Guidelines for Cities” (June 27, 2023) (blog), available at: <https://blogs.law.columbia.edu/climatechange/2023/06/27/proposed-regulations-for-direct-pay-under-the-inflation-reduction-act-guidelines-for-cities/>
- Amy Turner, “Cities & the Inflation Reduction Act” (August 22, 2022) (blog), available at: <https://blogs.law.columbia.edu/climatechange/2022/08/22/cities-the-inflation-reduction-act/>
- Amy Turner, “Inflation Reduction Act: Implementation Gaps for Local Governments & How to Close Them” (May 25, 2023) (blog), available at: <https://blogs.law.columbia.edu/climatechange/2023/05/25/inflation-reduction-act-implementation-gaps-for-local-governments-how-to-close-them/>.
- Alison F. Takemura, “Your cheat sheet to the climate law’s consumer incentives” (August 17, 2023) *Canary Media*, available at: <https://www.canarymedia.com/articles/electrification/your-cheat-sheet-to-the-climate-laws-consumer-incentives>.