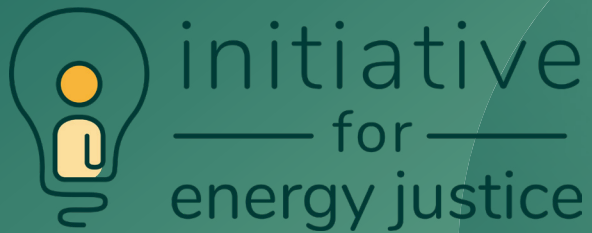


JUSTICE IN 100:

Analysis of the First Ten 100% Laws in the U.S.



August 2023



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Executive Summary

Hawai'i was the first jurisdiction in the U.S. to enact a law that requires a complete transition to renewable energy away from fossil fuels. This type of law is widely referred to as a 100% law, pertaining to the percentage of renewable energy that is required by the state's renewable portfolio standard. Since Hawai'i's law was enacted in 2015, nineteen other jurisdictions have passed similar laws. All of these laws vary in their timeline and ambitions for adoption of renewable energy. These laws also display disparate levels of commitment to environmental and energy justice, which is reflective of political context and efficacy of grassroots advocacy in the jurisdiction.

Since the electricity sector is responsible for twenty-seven percent of U.S. greenhouse gas emissions, 100% laws are crucial.¹ They are one of the established policy tools available to legislators, regulators, and advocates to advance adoption of cleaner sources of energy. With the persistent advocacy of frontline communities and grassroots organizations, this particular tool has recently been morphed to begin to consider energy justice; recognizing that one legal tool will not ensure a just future or rigorously repair for past harms caused by the current energy system. Currently, there is an enormous gap in how each of the existing 100% laws meaningfully contend with and deliver energy justice. To support policymakers and advocates in prioritizing energy justice in 100% laws, the Initiative for Energy Justice (IEJ) created the *Justice in 100 Scorecard*. The scorecard equips stakeholders with a framework for analysis to apply best practices in their respective political contexts to further energy justice principles in the adoption of 100% laws.

This report uses the *Justice in 100 Scorecard* to analyze ten 100% laws' performance across five energy justice indicators: *Process*, *Restoration*, *Decision-Making*, *Benefits*, and *Access*. These indicators, inspired by the three scholarship-based energy justice pillars—procedural, substantive, and restorative justice—encompass questions related to targets, definition

for marginalized communities, consultation processes, affordability, governance structures, non-energy benefits, and more. The results from the analysis reify the level of commitment each jurisdiction demonstrates for an aggressive, clean, just, and comprehensive transition to renewable energy.

Specifically, New York and Washington demonstrate the highest relative commitment to energy justice across all five indicators. New Mexico must be highlighted for its emphasis on provision of resources and inclusion of indigenous communities in implementation. Virginia and DC were the only jurisdictions that created tiers of targets to prioritize solar and wind energy over other sources. DC's 100% law is also the only one that pushes for healthy buildings, safety, energy, and electrification through specific mechanisms, such as a building energy performance standard and energy efficiency programs.

This report evaluates the current state of 100% laws overall and unearths two specific energy justice issues that need greater attention and advocacy moving forward—the definition of renewable energy and the definition of marginalized communities. First, there is inconsistency across the ten jurisdictions in how renewable energy is defined. This creates substantial opportunity for energy sources backed by the fossil fuel industry to continue to be a part of the grid, contrary to policy goals. The report also outlines categories of technologies included across all ten jurisdictions by the degree of environmental and social harm to elucidate the level of alignment of each with energy justice goals. It underscores the need for a set of principles adopted by all jurisdictions to guide decision-making on which technologies to develop and how to develop them. Second, this report discusses three approaches adopted by jurisdictions to define marginalized communities: business-as-usual, income-based, and cumulative impact-based approach. Each approach's advantages and disadvantages are discussed, specifically from the perspective of outcomes and benefits for frontline communities.

Transforming the energy system to be just and to bear healthy outcomes for communities is no paltry task and one that cannot be tackled with a single tool or by one jurisdiction. 100% laws are one of the many tools that can bring the vision of a just, equitable, regenerative future closer to fruition. How paradigm shifting these laws are must be in the hands of communities that have historically been harmed by the energy system. IEJ offers the *Justice in 100 Scorecard* and this report to those communities and advocates, so they have a framework to help them determine where to channel their efforts and advocacy.

Introduction

JUSTICE IN 100: ADVANCING EQUITY IN ENERGY POLICY

How can equity and justice be advanced in the energy transition? The *Justice in 100 Scorecard* answers this question specifically in the context of renewable energy standards, a policy framework central to the transition to renewable energy. The *Justice in 100 Scorecard* is an equity centered scorecard for laws passed by states and territories committing to 100% renewable energy or 100% clean energy (referred to as “100% laws” in this report).²

The *Justice in 100 Scorecard* is a matrix of policy criteria specific to assessing a state, territory, or federal district’s (referred to hereafter as “jurisdiction[s]”) codified 100% law and the law’s ability to uplift energy justice in the pursuit of renewable energy goals. This equity-focused scorecard measures both social and environmental dimensions of these laws. The scorecard also acts as a growth framework to aid the design of equitable energy legislation, as well as a tool to assess a specific law’s ability to uplift the Initiative for Energy Justice’s (IEJ) five energy justice indicators: *Process, Restoration, Decision-Making, Benefits, and Access*. The *Justice in 100 Scorecard* provides a robust analysis of these indicators and its framework is utilized here to assess the first ten 100% laws.

This policy-specific scorecard builds on another resource that IEJ developed: *The Energy Justice Workbook*. This publication included IEJ’s *Energy Justice Scorecard*, which provided guideposts to advance equity-centered energy policy. *The Energy Justice Workbook* presents a definition for energy justice based on a detailed analysis of practice and scholarship in the field. As an expansion of the *Energy Justice Scorecard*, the *Justice in 100 Scorecard* was formulated.



DEFINITION OF ENERGY JUSTICE

“Energy justice refers to the goal of achieving equity in both the social and economic participation in the energy system, while also remediating social, economic, and health burdens on those historically harmed by the energy system (“frontline communities”). Energy justice explicitly centers the concerns of marginalized communities and aims to make energy more accessible, affordable, clean, and democratically managed for all communities. The practitioner and academic approaches to energy justice emphasize these process-related and distributive justice concerns.”³

Laws that mandate 100% renewable energy are important legal frameworks that shape how jurisdictions transition away from fossil fuels and design a new energy system. The common foundation for all 100% laws is a renewable portfolio standard (RPS), which may also be referred to as a renewable energy standard or clean energy standard. These energy standards require electrical power providers to source a certain amount of their electrical generation from resources defined as clean or renewable, relying on incremental targets that increase over time. Although many jurisdictions already have some form of an energy standard in place, 100% laws refer to a jurisdiction’s adoption of energy standards committing to meet 100% of its electrical generation needs through clean or renewable resources by a specified date. The targets, compliance frameworks, and qualifying generation definitions of these policies vary across jurisdictions.

100% laws carry greater policy implications that determine who will reap the benefits and bear the burdens associated with the transition. 100% laws may also dictate guidelines regarding the means of transition such as the:

- 1) prioritization of various ownership, governance, and financing structures;
- 2) types of generation technologies that are built;
- 3) mix of distributed versus transmission scale generation;
- 4) processes for stakeholder engagement and decision making;
- 5) requirements for procurement and site selection;
- 6) the extent that transition costs will be shifted onto ratepayers, expanding existing practices whereby profit-oriented utilities shift utility system costs onto the rate base.

100% LAWS MAY PERPETUATE INEQUITABLE ENVIRONMENTAL LEGACIES

The Lawrence Berkeley National Lab attributes an estimated forty-five percent of renewable energy growth to states' RPS.⁴ Although it is the core policy mechanism at the heart of 100% laws, the original concept of RPS served a limited goal of guaranteeing market share for specific renewable technologies. RPS laws were primarily enacted in the 1990s and 2000s and were intended to grow the renewable energy sector without explicit concern for distributional impacts.⁵ These laws were not an explicit or comprehensive strategy for mitigating climate change, let alone advancing energy justice, often due to the low percentages of electrical generation required to be sourced from renewable or clean energy sources.⁶ Although the RPS topically concerned the advancement of renewable energy, it was not created to legislatively house a justice-oriented definition of renewable energy. The drafting of historical RPS laws did not consider whether the technologies it was encouraging would be deployed to equitably distribute the benefits and burdens associated with renewable energy development, improve public health outcomes, preserve biodiversity and ecological health, promote water quality and availability, or respect Indigenous sovereignty.⁷

If 100% laws frame equity as an ancillary issue, they replicate legacy inequities from the fossil fuel paradigm in the emerging renewable energy system. For generations, environmental gains have been won by concessional policies hinging advancement on the continued marginalization of specific groups and communities through the creation of sacrifice zones.⁸ Legally binding regulatory frameworks codified in laws like the Clean

Air Act and the Clean Water Act made compromises at the expense of marginalized communities, who experienced persistent concentrations of adverse health and environmental impacts.⁹ This progression of environmental policy in the 1970s catalyzed the rise of the environmental justice movement in the 1980s, when low wealth, Black, Indigenous, People of Color (BIPOC) communities realized that legislative protections for the rights to clean air and clean water did not extend to them.¹⁰

If 100% laws frame equity as an ancillary issue, they replicate legacy inequities from the fossil fuel paradigm in the emerging renewable energy system.

Paralleling the trends of 1970s era environmental advances, BIPOC, and low wealth communities are the last groups to transition to renewable energy and

the first to disproportionately carry burdens associated with the transition.¹¹ The escalation of climate change paired with an equity-blind approach to 100% laws will further burden marginalized communities for the sake of “environmental progress” despite a growing vulnerability to climate-related hazards.

Recognizing the importance of 100% laws, IEJ created the *Justice in 100 Scorecard* for three primary reasons:

- 100% laws are necessary (but not sufficient) for a transformative transition to a regenerative economy.
- These laws vary significantly, particularly as applied to successes and failures in advancing energy justice. This tool provides a framework for more consistent comparison.
- Advocates and policymakers need tools to design and implement 100% laws that prioritize equity in the transition to renewables.

To prioritize energy justice, advocates and policymakers must be equipped with mechanisms for analysis of existing 100% laws in order to apply best practices in their political contexts. Community advocates need resources for informed engagement and accountability in the creation or oversight of 100% laws. Similarly, policymakers considering passing or reforming such laws need guidance in centering equity, building on the examples of other jurisdictions.

Therefore, this report will present the Justice in 100 Scorecard framework and use it to analyze ten 100% laws’ performance across five energy justice indicators. Additionally, the report will evaluate how renewable energy technologies and marginalized communities are being defined, two facets of 100% legislation identified by the scorecard framework as critical to advancing energy justice.

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Methodology

SCOPE OF ANALYSIS

The purpose of the scorecard is to provide a score for a jurisdiction's adopted law, not the ambition or direction that the legislation sets out. The scores evaluate a jurisdiction's 100% law in isolation. It is not intended to be an exhaustive analysis of all laws or regulations adopted in a jurisdiction that enable it to achieve its 100% target. These scores illustrate the necessity for jurisdictions to craft comprehensive energy justice 100% laws, which ensure that all aspects of equity for marginalized communities are implemented.

A portion of the scoring criteria directly scores the implementation of rulemaking and the regulatory process. However, this scoring criterion is only granted to jurisdictions if there is language specifically drafted into the 100% legislation informing the implementation of the rulemaking process. Multi-tiered scoring is embedded into the evaluative process for jurisdictions and advocacy groups to understand the varied levels at which different types of 100% policy impact marginalized communities. Where the terms "legislative process" or "lawmaking" are used, the scorecard is referring to the adoption of 100% of the law that is being passed. The terms "rulemaking" or "regulatory process" refer to indicators of the existing 100% law that will provide the basis for the regulation or rulemaking process.

SCORECARD FRAMEWORK

The scorecard, **FIGURE 1**, aims to evaluate equity in 100% laws by focusing attention on *five* key areas:

- **Indicator 1 - Process:** the process for developing the law;
- **Indicator 2 - Restoration:** whether the law addresses the harms communities have faced in the current energy system;
- **Indicator 3 - Decision-Making:** the role marginalized communities play in the implementation of the law;
- **Indicator 4 - Benefits:** the range of benefits provided by the law;
- **Indicator 5 - Access:** and the degree of energy access achieved by the law.

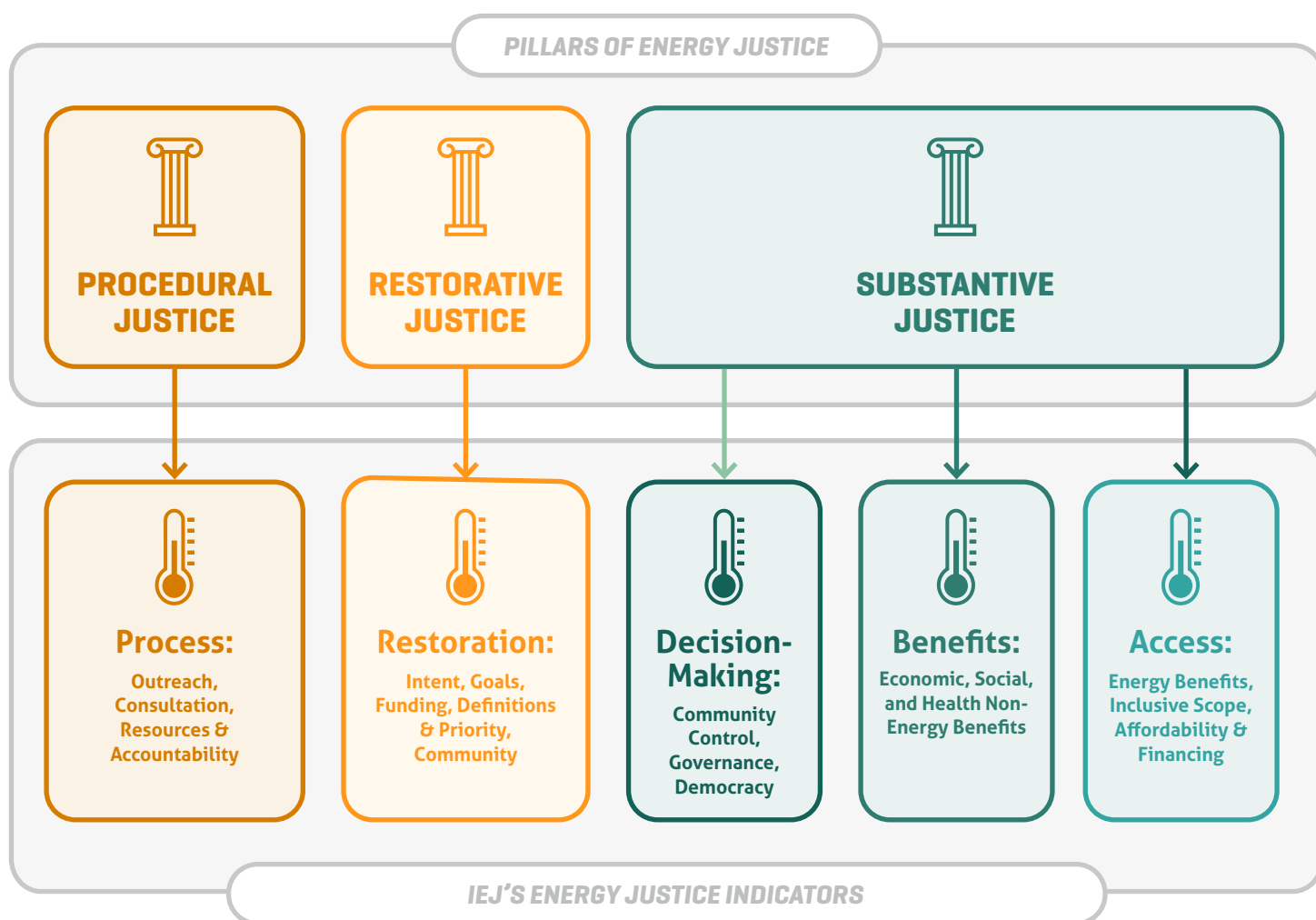


FIGURE 1: Mapping the scorecard framework's five energy justice indicators onto three scholarship-based pillars of energy justice

An overemphasis on scores detracts from the core purpose of the scorecard framework, which is to provide a structure that identifies how 100% laws implicate equity and can be designed to holistically advance all forms of energy justice.

In the [Appendix](#), scores for each of the ten codified 100% laws are shared in two formats. The one-page scorecard communicates scores for the five energy justice indicators, positioning it as a high-level analytical summary of the law's commitment to energy justice. Each one-page scorecard contains a scoring key that describes how numerical scores synthesize a law's likelihood of advancing energy justice for a particular energy justice

indicator.¹² Energy justice indicator scores are the mean-weighted average of sub-indicator scores (see **FIGURE 2** for more information on sub-indicators). The long narrative answer indicator summarizes the findings of the evaluation using the five-page worksheet, providing five to ten pages of detailed analysis for each law. The varying depth of these two formats encourages readers with a mix of perspectives and aims for policy engagement to utilize the scorecard in a manner most appropriate for them.

While the score for each indicator provides a way to analyze how a law promotes energy justice, scores should not be used in isolation. Scores alone must not be used to justify sweeping generalizations about a law's performance, overall. This analysis weighted sub-indicator scores equally; however, communities may draw different conclusions and attribute differing significance to each sub-indicator. This is just one example of how scoring conveys decisions or preferences. An overemphasis on scores detracts from the core purpose of the scorecard framework, which is to provide a structure that identifies how 100% laws implicate equity and can be designed to holistically advance all forms of energy justice. Scores serve as a step in this process by offering a method for reflecting on the utility of various policy mechanisms. This helps to highlight their strengths and weaknesses and sort through the vast legislation. IEJ's *Energy Justice Workbook* explains in detail the research, analysis, and synthesis that led to the selection of the five indicators and accompanying questions, as well as the sub-indicators used to inform scoring.¹³

Special note: Distinction between indicator 1: Process and indicator 3: Decision-Making:

Both the *Process* and *Decision-Making* indicators involve aspects of community participation and self-determination. However, there is a distinction between what policy elements

are evaluated under one indicator versus the other. *Process* (Indicator 1) is focused on the policy-making (law-making and rule-making) stages, whereas *Decision-Making* (Indicator 3) is focused on implementation in programs and projects created or incentivized by the policy. The *Process* indicator covers participation that leads to the passage of a law, or in the adoption of rules and regulations by administrative bodies. Separately, the *Decision-Making* indicator relates to how the policy enables community governance, ownership, control, leadership, and agency in project development.

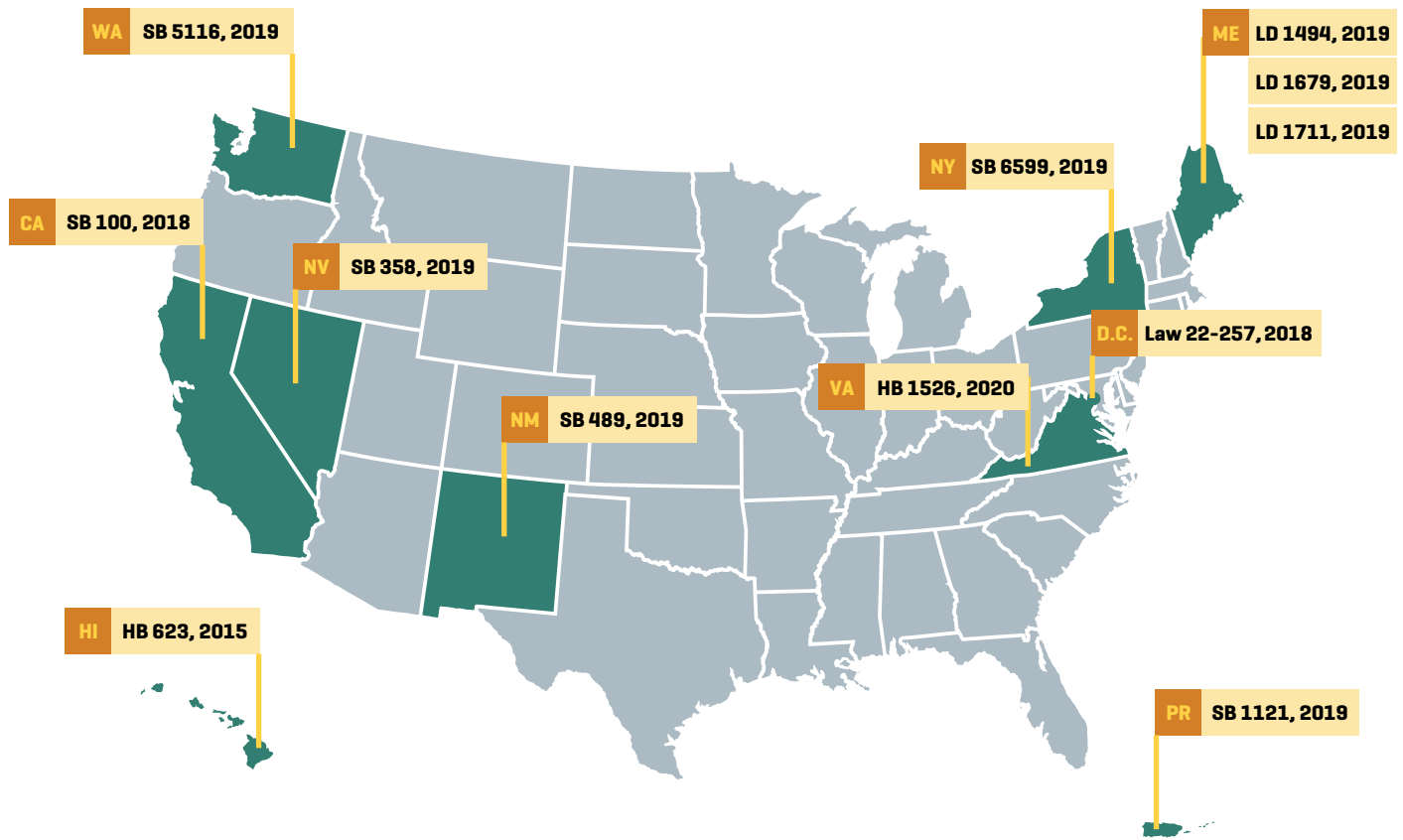
SCORECARD FRAMEWORK ANALYSIS

This report applies the *Justice in 100 Scorecard* to evaluate the ten earliest 100% laws passed at the state or territory level. The laws considered in this analysis were selected based on the 100% laws identified by the Sierra Club's *Ready for 100 Campaign*.¹⁴ In some circumstances, adjacent legislation or statutes are considered, especially when they contain definitions or context critical to accurately interpreting the law in question. In addition to reviewing the content of codified laws, a series of conversations with advocates in the impacted jurisdictions were conducted between November 2020 and June 2021 (see [Acknowledgement](#) section for participants). These conversations provided a space for frontline-based and local environmental groups to share their experiences in the lawmaking process, informing scores that concern procedural justice—which cannot be determined from siloed legal analysis.

IEJ met primarily with individuals who personally come from, or are in direct association with, frontline and other marginalized communities and/or represent justice-centered energy, environmental, or climate groups. Forty-five advocates and practitioners representing thirty-six organizations shared information on who participated in lawmaking, the extent which involved entities were represented in decision making, and any efforts that were made to engage with marginalized communities and the public. Through dialogue and written feedback, advocates weighed in on the draft scores that were generated by IEJ staff, as well as shared context for the broader climate and environmental legislative history of their jurisdiction. Finally, the initial scores were revised based on the feedback collected through this process.

Applying the Scorecard to Evaluate Ten 100% Laws

In this section, the overall findings from the application of the *Justice in 100 Scorecard* to the chosen ten jurisdictions are concisely outlined. The selected 100% laws—California (SB 100, 2018), District of Columbia (Law 22-257, 2018), Hawai'i (HB 623, 2015), Maine (LD 1494, 2019; LD 1679, 2019; LD 1711, 2019), Nevada (SB 358, 2019), New Mexico (SB 489, 2019), New York (SB 6599, 2019), Puerto Rico (SB 1121, 2019), Virginia (HB 1526, 2020), and Washington (SB 5116, 2019)—range significantly in their commitment to advancing energy justice.



Some laws make concerted efforts to advance energy justice across multiple indicators, while others only focus on a single indicator, if at all. In addition to a varied commitment to energy justice across laws, there is an inconsistent commitment to justice across indicators. There is a lack of model strategies to advance energy justice for two of the five indicators due to the fact that no law demonstrates a satisfactory commitment to these indicators.

Findings are organized by energy justice indicator (see **FIGURE 2**), highlighting approaches taken by laws that score highest for a particular indicator. The scoring for the jurisdictions is attached in the [Appendix](#).

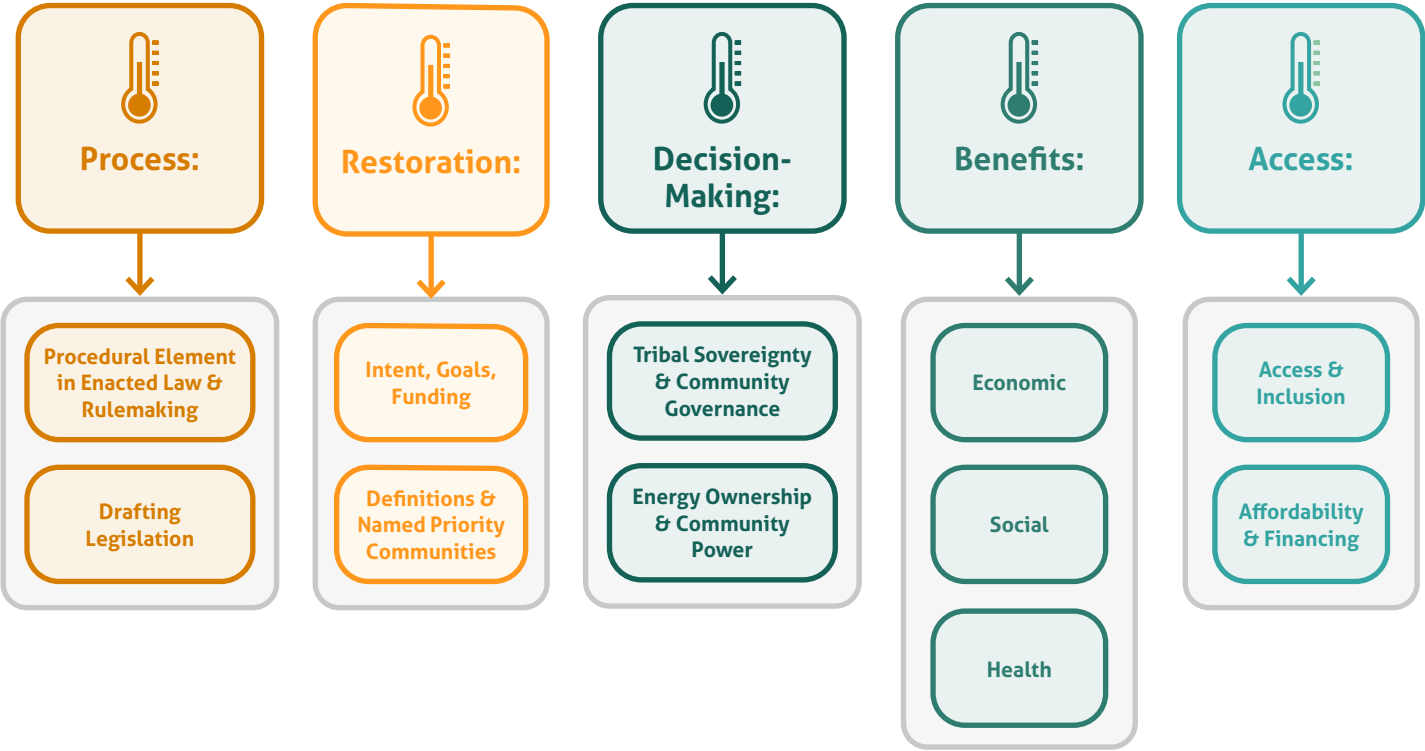


FIGURE 2: Flowchart displaying the indicators of the Justice in 100 scorecard and each indicator's corresponding sub-indicators

INDICATOR 1: PROCESS



This indicator of the scorecard is designed to evaluate whether marginalized communities meaningfully participated in the policymaking process with sufficient support. Maine, New York, and Washington scored the highest in this indicator overall, as shown in **FIGURE 3**.

Drafting Legislation

Under the first part of the *Process* indicator, *Drafting Legislation*, New York’s Climate Leadership and Community Protection Act (SB 6599) performed better in comparison to the other nine jurisdictions. Based on conversations with several community advocates in New York, it was evident that advocates were heavily involved in lawmaking. This was despite a limited formal public engagement process. The strides made in the NY Climate Act were predominantly through community organizing efforts and mounting political pressure to address justice concerns. Activists were able to make substantive contributions to SB 6599 ([Appendix](#)) to produce detailed and cohesive equity-focused legislation, providing frameworks to ensure that legislative goals translate into implementation.¹⁵

FIGURE 3: Jurisdictions’ performance on the spectrum of low to neutral to high for the indicator, Process

Procedural Element in Enacted Law and Rulemaking

Under the sub-indicator, *Procedural Element in Enacted Law and Rulemaking*, New Mexico, New York, and Maine's laws were the most comprehensive. New Mexico's Energy Transition Act is the only law that devotes resources to Indigenous communities and includes consideration for collaboration with Indigenous communities.¹⁶ This law was the direct result of the advocacy of representatives from the Diné Nation. While progress has been made, this provision does not sufficiently commit the legislation to principles of free, prior, and informed consent; additional action is required to ensure that indigenous sovereignty is increased across all matters of implementation.¹⁷ None of the other jurisdictions considered in this analysis have established mandates and incentives for inclusion of Indigenous communities.

Eight out of ten jurisdictions do not provide structures for rulemaking with meaningful public participation and participation of marginalized communities. New York sets an exemplary standard by establishing a Climate Action Council with working groups focused on environmental justice and just transition. This Council is composed of members from diverse backgrounds, including ones representing "disadvantaged communities." SB 6599 mandates that these groups must be consulted or collaborated with in the process of drafting the State Energy Plan, setting criteria for identifying "disadvantaged communities," establishing the standards and methodology for emissions reductions, and contributing to the activities of every climate action working group.¹⁸ New York does not offer financial compensation to council members responsible for the climate action plan, unless they are already employed by the state in some capacity.

INDICATOR 2: RESTORATION



The second indicator of the scorecard, *Restoration*, is designed to evaluate whether the policy remedies prior and present harms faced by communities negatively impacted by the fossil fuel energy system. This part of the scorecard analyzes which communities are prioritized and how, and which technologies are named as renewable for the transition from fossil fuels. Overall, the states of New York and Washington performed better than other jurisdictions on the metrics included in this indicator, as shown in **FIGURE 4**.

Intent, Goals, and Funding

For the *Intent, Goals, and Funding* sub-indicator, although other jurisdictions create funds or consider forms of justice, the NY Climate Act is the only one that explicitly states just transition as a goal and establishes a Just Transition Working Group. The NY Climate Act creates electricity sector targets to reduce greenhouse gas emissions forty percent below 1990 levels by 2030 and eighty five percent below 1990 levels by 2050. The remaining fifteen percent of emissions are offset by alternative compliance mechanisms that are more ambitious than what is required by Intergovernmental Panel on Climate Change projections for avoiding the most severe impacts of climate change and keeping warming below 1.5°C.¹⁹ Furthermore, this law directs funding to “disadvantaged communities” with a floor of thirty five percent and a goal of forty percent of all overall

FIGURE 4: Jurisdictions’ performance on the spectrum of low to neutral to high for the indicator, *Restoration*

spending benefits on clean energy and energy efficiency.²⁰ This aspect of New York's law was exceptional and successfully laid the groundwork for the federal government's Justice40 initiative.²¹

Definitions and Named Priority Communities

The *Definitions and Named Priority Communities* sub-indicator is further divided into two parts: *Definition of Renewable Energy* and *Prioritization of Marginalized Communities*. Under the first part of this sub-indicator, only DC and Virginia's laws include tiered prioritization structures with certain targets incentivizing regenerative renewable energy like solar and wind.²² DC's CleanEnergy Act phases out hydropower by 2020; mandates that ten percent of the standard be met through solar by 2041.²³ On the other hand, Virginia's Clean Economy Act requires investor owned utilities to secure either 600 or 16,100 megawatts of solar or onshore wind by 2030 and 2035, respectively; a distinction that depends on whether a utility was bound by an existing rate case settlement.²⁴

However, none of the laws include language barring the usage of gas power plants, renewable natural gas, fracking, clean coal, biofuels, biomass, nuclear, waste to energy (e.g., incineration), or waste heat from fossil fuel facilities.

Under the second part of this sub-indicator, *Prioritization of Marginalized Communities*, New York's SB 6599 stands out again because it embraces environmental justice in both language and practice. SB 6599 initiated processes to address legacy inequities and prevent their replication in the transition to renewable energy. For example, in addition to creating the equity-focused rule-making entities described in the *Process* indicator, the bill establishes equity-focused priorities to steer rule-making, methodology to identify "disadvantaged communities," and mechanisms to increase benefits and reduce burdens to "disadvantaged communities." The methodology used to identify "disadvantaged communities" will be designed by the Climate Justice Working Group in consultation with communities identified as "disadvantaged" by the analysis. The working group must use geographic, public health, environmental hazard, and socioeconomic criteria when articulating the definition and build on a list of potential parameters, which includes "members of groups that have historically experienced discrimination on the basis of race or ethnicity."²⁵ SB 6599 goes further than any other jurisdiction in these case studies to create restorative funding structures. It requires that state agencies, authorities, and entities consult with equity-focused groups to invest or direct programmatic resources to "disadvantaged communities" to receive forty percent (minimum of thirty five percent) of benefits on "clean energy and energy efficiency programs, projects or investments.

Washington's Clean Energy Transformation Act (SB 5116) is also important to highlight under this sub-indicator as it establishes definitions for "vulnerable population" (VP) and "highly impacted community" (HIC). For VP, socioeconomic factors are considered, and for HIC health sensitivity metrics from the Department of Health cumulative impact analysis are applied. The analysis will identify geographic areas experiencing high levels of fossil fuel pollution and climate change vulnerability, as well as areas designated as "Indian country." The law establishes a new definition for "public interest", which requires the following: "the equitable distribution of energy benefits and reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health, economic, and environmental benefits and the reduction of costs and risks; and energy security and resiliency. It is the intent of the legislature that in achieving this policy for Washington, there should not be an increase in environmental health impacts to highly impacted communities." This modification creates a nexus between the legislative intent of the bill and equity in the public interest. SB 5116 reiterates energy justice and just transition by requiring utilities to comply with components of the public interest definition, as well as establishing the "equitable distribution of energy and non-energy benefits" in achieving the RPS.²⁶

INDICATOR 3: DECISION-MAKING



Under the *Decision-Making* indicator of the scorecard, a set of six questions are included to ascertain whether the decision-making of marginalized communities was prioritized in the implementation of the law. A key consideration here includes an evaluation of whether the policy allows for ownership and control of energy assets by communities at the frontline of pollution and climate change, working class people, Indigenous communities, and those historically disenfranchised by racial and social inequity. This indicator is inclusive of questions related to Indigenous sovereignty, incentivization of community ownership, and utility reform to advance public-owned power. The in-depth analysis included in the [Appendix](#) reflected that New York, Maine, and Virginia performed the best of the ten jurisdictions in this indicator, as shown in **FIGURE 5**. The other seven jurisdictions were on par with each other. **Overall, this indicator is the lowest performing indicator across all indicators included in this scorecard.**

FIGURE 5: Jurisdictions performance on the spectrum of low to neutral to high for the indicator, *Decision-Making*

Energy Ownership and Community Power

Under the *Energy Ownership and Community Power* sub-indicator, Puerto Rico's Energy Public Policy Act (SB 1121) is critical to highlight as it ensures that electric power companies encourage and streamline processes for non-utility ownership through community solar and microgrids. It creates several frameworks to support the expansion of distributed renewable energy by establishing a net metering policy and requiring electric power companies to encourage and streamline processes for non-utility ownership. However, the primary – and sometimes only – goal for distributed renewable energy projects is increased grid reliability, with minimal focus on creating projects that build community wealth, which can serve as one form of reparations and distributive justice. However, fines of \$1,000 per day are levied for transmission entities for failing to comply with requirements for the interconnection of distributed generators or microgrids. Furthermore, SB 1121 mandates energy providers to conduct outreach for net metering programs on customer bills, including formatting specifications to ensure the information is appropriately sized and located where customers are likely to read it.²⁷

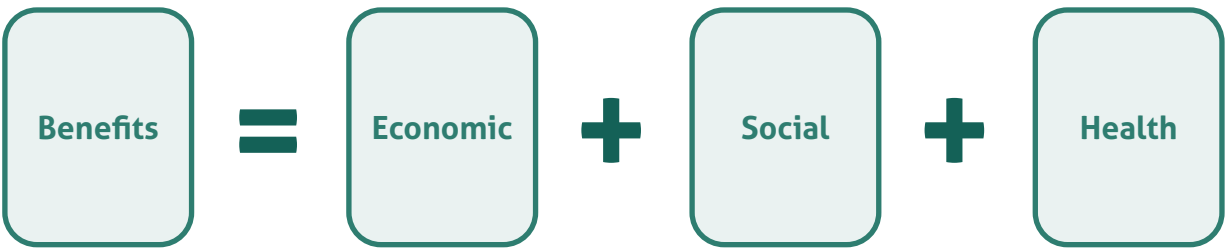
Maine's laws (LD 1494, LD 1679, LD 1711) establish a program to increase distributed renewable generation by soliciting bids for 400 MW of community-based renewable energy projects, of which 250 MW are reserved for shared distributed generation. The program uses a carveout mechanism to ensure that a certain percentage of project subscriptions are set aside for residential customers and low-to-moderate income households.²⁸ However, it does not utilize well established practices, such as inclusive financing, to reduce upfront costs and remove credit requirements that frequently exclude low-to-moderate income households from the benefits of community-based energy projects.²⁹ While technical aspects of this program could be improved to increase benefits to marginalized communities, Maine uses its 100% law to ensure that distributed, community-based energy is included in the vision for its renewable future.

Tribal Sovereignty and Community Governance

For the *Tribal Sovereignty and Community Governance* sub-indicator, New Mexico's 100% law was the only one that allocates funds to Indigenous communities through the Energy Transitions Indian Affairs Fund.³⁰ However, this law does not adhere to principles of free, prior, and informed consent or move beyond the context of the fund to increase energy sovereignty and expand benefits broadly.

Hawai'i is the only state out of the ten that has little to no consideration for inclusion, prioritization, and incentivization for the decision making of marginalized communities in implementation of its law.

INDICATOR 4: BENEFITS



For the *Benefits* indicator, the questions in the scorecard are tied to detecting how the policy centers economic, social, and health benefits for marginalized communities. Each of the sub-indicators is focused on the three above mentioned benefits. The purpose of this indicator is to analyze whether benefits of 100% laws expand beyond decarbonization of the grid and ensure that communities are not incurring additional harm due to the energy transition. These harms could include displacement, stranded assets, poor public health implications for marginalized communities, and economic impacts on fossil fuel workers. Overall, the in-depth analysis for this indicator revealed that the attempts at broadening benefits of the energy transition were merely gestural. Most jurisdictions lacked concrete implementation plans, mandates, and or funding structures to guarantee that there were worker protections, prioritization of women and minority owned businesses, anti-gentrification measures, and housing and transportation justice. In this indicator, Hawai’i, California, and Nevada are falling far behind the other jurisdictions, as shown in **FIGURE 6**.

FIGURE 6: Jurisdictions’ performance on the spectrum of low to neutral to high for the indicator, *Benefits*

Economic

For the *Economic* sub-indicator, the New Mexico Energy Transition Act (SB 489) performs well. This law dedicates funding to a Displaced Worker Fund for Energy workforce and supports the development of job training and apprenticeship programs. The Displaced Workers Fund will be used to assist: (1) employers of displaced workers to qualify for tax relief, (2) displaced workers to access development programs and cover costs associated with participating in certified apprenticeship programs, and (3) localities to support existing or new job training and apprenticeship programs. The apprenticeship programs encourage participation from those “underrepresented in the industry” and “disadvantaged communities.”³¹ SB 489 should be celebrated for attempting to guarantee career pathways for apprentices by requiring them to constitute twenty-five percent of the construction team for all in-front-of-the-meter renewable energy projects by the year 2025.

Social

For the *Social* sub-indicator, DC’s CleanEnergy Act is worth noting. This law significantly pushes for healthy building, safety, energy, and electrification, but does not include specific language to ensure benefits are distributed equitably. Law 22-257 also focuses on transportation electrification and emissions reductions through a transportation electrification plan, requiring “all public buses, passenger- and light-duty vehicles associated with privately-owned fleets, commercial motor carriers, limousine-service vehicles, and taxis” to be zero-emission vehicles by 2045. The law also requires the revision of the vehicle excise tax structure based on fuel efficiency measures. This regressive tax shift will disproportionately impact vehicle owners in marginalized communities as older and less efficient cars will be more expensive to register. The law does exempt families who receive the earned income tax credit.³²

Health

Lastly, for the *Health* sub-indicator, New York’s SB 6599 establishes a community air health monitoring program, with criteria for study and program implementation. It also prioritizes measures to maximize net reductions of greenhouse gasses and co-pollutants in “disadvantaged communities.”³³

INDICATOR 5: ACCESS



Access, the last indicator in the scorecard, is focused on assessing whether the particular law makes energy more accessible and affordable for marginalized communities, either through inclusive financing models or comprehensive utility accountability structures. This indicator also addresses gaps in the types of people or households who are considered to benefit from the energy transition, such as renters or people residing in mobile homes. Analysis included in the [Appendix](#) reflected that DC, New York, Washington, and Puerto Rico performed the best of the ten jurisdictions in this indicator, as shown in **FIGURE 7**. DC and Washington particularly stand out with their focus on energy affordability programs for low-income households.

Access and Inclusion

For the sub-indicator, *Access and Inclusion*, it is noteworthy that every law requires that investor-owned utilities (IOUs) meet the RPS. All jurisdictions – except Virginia and New Mexico – require that both municipal and cooperative utilities meet the standard as well, although they may be held to slower transition timelines and reduced reporting requirements than those imposed on IOUs. Given these varying standards, utility end users in the same jurisdiction can experience different renewable energy or energy justice outcomes based on the service territory in which they are located.

FIGURE 7: Jurisdictions’ performance on the spectrum of low to neutral to high for the indicator, Access

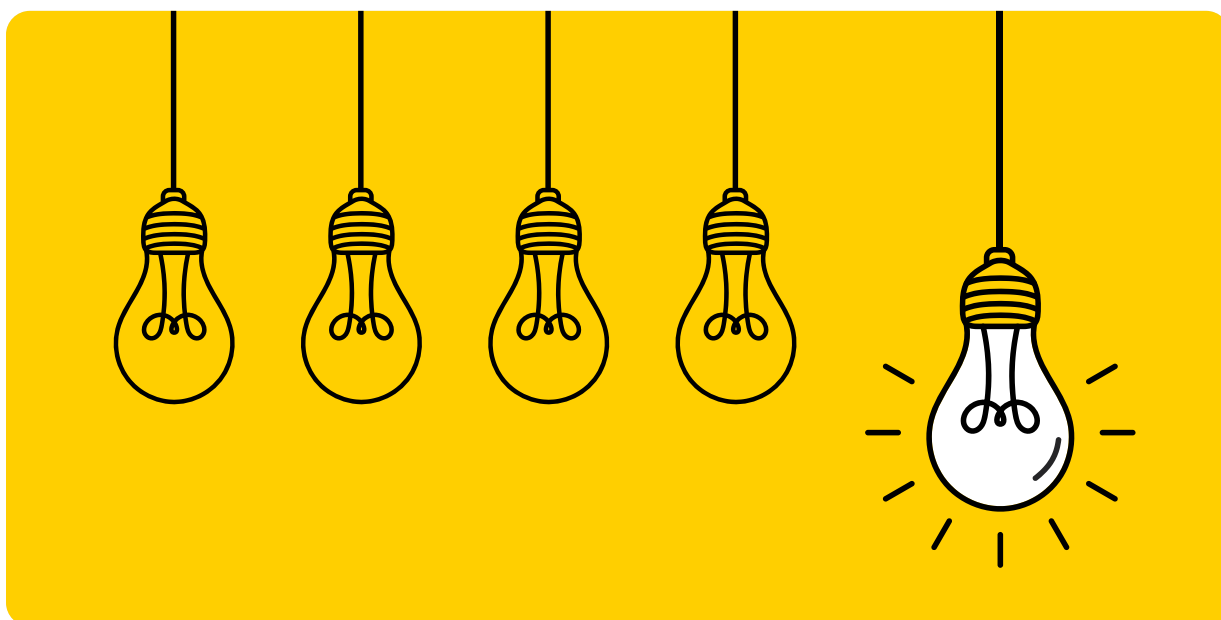
The Puerto Rico Energy Public Policy Act (SB 1121) lists energy access and affordability for low-to-moderate income, off-grid, and rural communities as policy goals; however, it takes limited measures to ensure these goals are met. SB 1121 lacks guaranteed need-based support for eligible households, instead relying on an unspecified amount of “reliable” renewable energy projects for low-to-moderate income communities financed by the Green Energy Trust.³⁴

Affordability and Financing

For the *Affordability and Financing* sub-indicator, Washington’s Clean Energy Transformation Act makes concerted changes to improve energy affordability for low-income households by requiring every utility to operate an energy assistance program, with prioritization for low-income households experiencing high energy burden. This includes an assessment of the funding increases needed – at the granularity of individual utilities – to phase up energy assistance coverage to meet ninety percent of need by 2050.³⁵

With the analysis of the aforementioned 100% laws with the *Justice in 100 Scorecard*, metrics under the indicators, *Process*, *Restoration*, and *Benefits*, exhibited better overall performance by jurisdictions in comparison to the indicators, *Decision-Making* and *Access*. Through IEJ’s framework and analysis, it is evident that some jurisdictions have meaningfully used this particular legal vehicle to make strides on issues congruent with energy justice. Questions under each of the indicators, which can be found in the [Appendix](#), regarding restorative funding structures, comprehensive coverage of all utilities, methodology to define disadvantaged communities, and prioritization of distributed generation showed encouraging progress. As early adopters, each of the ten jurisdiction’s lawmakers had unique hurdles and constituent concerns. Varying goals and timing led to adoption of more robust 100% laws in some jurisdictions, like New York and Washington, while others kept their statutory framework narrow in scope, such as California and Hawai’i. Other states, like Virginia, made significant strides within their political environments. The organizing and advocacy efforts of grassroots environmental justice groups contributed significantly to the accomplishments of most jurisdictions.

Legislative Gaps and Areas for Improvement



Along with the scorecard framework, this report assesses the definitions of renewable energy and marginalized communities set forth in all ten 100% laws. These definitions are evaluated to ascertain whether they will deliver an energy transition that is equitable for communities. This is especially important for those who have disproportionately borne the brunt of the current energy system. The following section on renewable energy evaluates whether energy technologies labeled as “renewable” contribute to improved social, economic, and environmental outcomes, particularly for frontline communities. The subsequent section describes three approaches 100% laws take to defining marginalized communities. It also characterizes how such definitions may be used to advance energy justice for historically and currently impacted communities across all aspects of the law.

DEFINITION OF RENEWABLE ENERGY

All 100% laws aim to reduce greenhouse gas emissions by reducing fossil fuel dependence through renewable energy; some of the laws also prioritize energy and environmental justice. Most technologies, of any form, have the potential of causing environmental degradation or injury to communities—especially when there is limited oversight. Therefore, to ensure that the transition outlined in a 100% law has just outcomes, it must include incentives for technologies that are known to cause least social, ecological, and health related damage.

Considering the ten 100% laws collectively, there is a consistent gap in how renewable energy is defined and leveraged to deliver the transition in an equitable way. All of the laws are deficient in justice-oriented definitions of renewable energy, which creates an opportunity for harmful energy technologies to be included in the energy transition. Consequently, principles of justice are not advanced through these technologies and the necessary evolution they herald. These findings demonstrate that without holistically considering and mitigating the negative impacts of various energy technologies, the ten laws included in the analysis fail to advance energy justice.

As **TABLE 1** shows, the ten laws in this analysis define renewable energy as one that uses regenerative and non-regenerative sources, such as solar, biomass, geothermal, hydropower, etc. Only two jurisdictions, Virginia and DC, establish tiered prioritization for less harmful renewable energy sources; other jurisdictions do not prioritize less harmful energy sources. Moreover, seven of the eleven technologies considered as “renewable” are inconsistently defined as renewable across jurisdictions. Thus, approximately sixty three percent of technologies that were defined as renewable in at least one jurisdiction are simultaneously being defined as nonrenewable by another. Despite the fact that all of these laws aim for a 100% renewable future, their visions vary dramatically across the country.

TABLE 1: DEFINITION OF RENEWABLE ENERGY BY LAW

JDX	Definition of “Renewable Energy”
CA	Definition includes a mix of more to less harmful sources—including biomass, digester gas, fuel cells using renewable fuels, geothermal, hydroelectric of thirty megawatt or less, landfill gas generation technologies, photovoltaic, solar thermal, and wind. There is no tiered distinction between sources.
DC	Definition includes a mix of more to less harmful sources—including biomass, fuel cells powered by any resource defined as renewable, geothermal, hydropower, landfill gas, ocean, solar, waste-water treatment gas, and wind. Establishes a tiered prioritization system that phases out hydropower by 2020. It mandates that ten percent of the standard be met through solar by 2041.
HI	Definition includes a mix of more to less harmful sources—including biofuels, biogas, biomass, falling water, geothermal, hydrogen produced from renewable sources, sun, ocean and tidal, and wind. There is no tiered distinction between sources.
ME	Definition includes a mix of more to less harmful sources—including biomass, fuel cells, geothermal, hydroelectric, solar, tidal power, waste-to-energy, and wind. The definition explicitly states that “the Commission may not promote any renewable resources over others.”
NV	Definition includes a mix of more to less harmful sources—including biomass, geothermal, hydroelectric, solar, and wind. There is no tiered distinction between sources.
NM	Definition includes a mix of more to less harmful sources—anaerobically digested waste biomass, biomass resources, fuel cells, geothermal, hydropower, landfill gas, solar, and wind. There is no tiered distinction between sources.
NY	Definition includes a mix of more to less harmful sources, including biogas, biomass, liquid biofuel, fuel cells, hydroelectric, solar, tidal ocean, and wind. While it does not set a tiered distinction between sources, it establishes goals to deploy six gigawatts of distributed solar energy by 2025 and three gigawatts of storage by 2030.

<p>PR</p>	<p>Definition includes sub-definitions for “sustainable renewable energy” and “alternative renewable energy.” Sustainable renewable energy includes a mix of more to less harmful sources, including biofuel from renewable biomass, geothermal, hydropower, renewable biomass combustion, renewable biomass gas combustion, marine and kinetic, ocean thermal, solar, and wind. Alternative renewable energy only includes non-regenerative sources such as anaerobic digesters and landfill gasses.</p> <p>While there are no mechanisms to encourage the use of less harmful over more harmful sources, or a distinction between sustainable and alternative renewable energy in meeting the RPS, SB 1121 sets a policy goal to “strengthen the research and development of solar, hydroelectric, wind, and ocean power, among other sustainable power generation technologies to maximize their use.” The use of coal will be phased out after 2028, but SB 1121 supports use of natural gas as a transition fuel through requirements that all new non-renewable generation facilities be equipped to process natural gas. Within five years, sixty percent of fuel from fossil fuels must be “high efficiency,” requiring the modernization of existing facilities.</p>
<p>VA</p>	<p>Definition includes a mix of more to less harmful sources—including biomass, energy from waste, falling water, geothermal power, landfill gas, municipal solid waste, solar, tides, wave motion, and wind. There are portfolio requirement thresholds for wind and solar. Phase I utilities must generate or purchase 600 megawatts of energy from solar or onshore wind by 2030. For Phase II utilities, the value climbs to 16,100 megawatts of energy from solar or onshore wind by 2035. Electricity generated by existing nuclear resources is subtracted from the RPS, extending the use of nuclear energy along the lifetime of operational facilities. The law partially retires coal-fired utilities by 2024.</p>
<p>WA</p>	<p>Definition includes a mix of more to less harmful sources—including biodiesel, biomass energy, geothermal energy, renewable hydrogen, renewable natural gas, solar energy, water, wave, ocean, and tidal energy, and wind. There is no tiered distinction between sources.</p> <p>The lack of tiered distinction between renewable resources is notable given Washington’s dependence on hydroelectric generation from dammed rivers, which presently accounts for over two thirds of the state’s annual electricity generation. As an eligible renewable resource, an abundance of hydropower may underpin the state’s 2030 commitment to carbon neutral electric generation. While hydropower can help Washington meet its transition goals, many of the existing facilities impart significant adverse environmental and social impacts.</p>

This significant lack of consensus on the definition of “renewable energy” creates barriers for advocates and communities to hold states accountable and ensure harms are not perpetuated on marginalized communities. Beyond sowing confusion, a lack of consistency makes it easier for controversial – and outright nonrenewable – energy technologies to masquerade as less nefarious. To address this issue, a unified framework that clearly

To address this issue, a unified framework that clearly acknowledges the harm each energy source causes must be created and applied consistently across the jurisdictions.

acknowledges the harm each energy source causes must be created and applied consistently across the jurisdictions. This framework should include specific definitions of renewable and nonrenewable technologies, and establish clear parameters for their use. This will allow for better oversight and enforcement of laws that protect communities.

Environmental and Social Impacts of Energy Sources

A definition of renewable energy that excludes justice-oriented principles will continue the harm caused to communities by the fossil fuel industry.

As the analysis in this section shows, eighty percent of laws include at least three non-renewable technologies in their definition of renewable energy. Every law includes at least one non-renewable technology. Various laws contradict which energy sources are renewable or nonrenewable. This section divides the technologies adopted across 100% laws into three categories - most harmful, potentially harmful, and least harmful. These categories are based on the potential for harm that each technology poses to the environment, public health, and human rights. The most harmful category includes technologies that have an immediate and significant impact, while the least harmful category includes technologies with minimal harm.

Most harmful

Six technologies included in ten of the 100% laws have been documented to have several detrimental qualities. These technologies are: biofuels, biomass, fuel cells, hydrogen, renewable natural gas, and waste to energy.³⁶ Research has found that many of these technologies negatively impact health and safety through increase in air pollution, strain other systems and non-regenerative resources, are under-developed, and do not substantially reduce emissions. For example, renewable natural gas, hydrogen, waste to energy, and biofuels all produce nitrogen oxides (NO_x), a family of gasses that cause respiratory illness. These gasses increase a person’s vulnerability to, and severity of, respiratory infections and

asthma, as well as chronic lung disease.³⁷ Some of these “renewable” energy technologies emit higher levels of NO_x than their defamed fossil fuel counterparts. For example, hydrogen is posed as a low-carbon, renewable alternative to natural gas despite a New York Power Authority demonstration project where NO_x emissions increased by up to twenty four percent as the fraction of hydrogen blended with natural gas increased.³⁸ In addition to NO_x, biofuels and waste incineration are super polluters, releasing a cocktail of dangerous pollutants. For example, pollutants from waste incineration include heavy metals like mercury and lead, per and polyfluoroalkyl (PFAs) - “forever” chemicals, persistent organic pollutants that have made the dirty dozen list, particulate matter and more.³⁹ These chemicals have been linked to cancer, severe neurological and behavioral disorders, pulmonary disease and other respiratory damage, heart attacks, and increased risk of miscarriage.⁴⁰

In addition to the direct harms, many of the above listed technologies do not significantly or consistently reduce greenhouse gas emissions. All types of hydrogen, produced from either methane gas or electrolysis of water, require large amounts of energy to produce and are significantly less efficient than other technologies. Alarming, hydrogen produced from methane produces nine parts of carbon dioxide (CO₂) for every part of hydrogen gained, opening the door for continued fossil fuel combustion paired with carbon capture and storage technologies—widely considered to be false solutions by frontline communities.^{41,42} Additionally, hydrogen injected into pipelines that leaks from pipelines and processing facilities into the atmosphere has a global warming potential thirty-three times greater than carbon dioxide over a twenty-year timespan.⁴³ Thus, the inclusion of these technologies without comprehensive consideration for health and environmental impacts is poorly aligned with energy justice tenets. A transition from fossil fuels to reliance upon these technologies will not address the climate crisis and the burgeoning demands for environmental justice.

Potentially harmful

Geothermal, hydroelectric, and ocean technologies have the potential to inflict adverse social and environmental harms. As such, it is important that laws contain strong parameters, including processes to analyze localized environmental damage through close consultation with relevant communities. According to *Comprehensive Building Blocks for a Regenerative and Just 100% Policy*, hydroelectric power requiring dams “have wreaked havoc on Indigenous communities, resulting in forced displacement, flooding of lands, and deforestation, particularly among poor communities.”⁴⁴ Applying IEJ’s definition of energy justice, specifically where it describes “remediating social, economic, and health burdens on those disproportionately harmed by the energy system,” it is ostensible that inclusion of hydroelectric power in a 100% law is deliberated thoroughly.

In the case of geothermal energy, the potential environmental impacts are dependent on siting and technology. Research shows that the greenhouse gas and land use impacts are considerably low for all types of geothermal plants—flash steam, enhanced geothermal systems, and geothermal heat pumps—in comparison to other energy sources. “Life cycle assessment (LCA) studies estimate that full lifecycle CO₂-equivalent emissions for geothermal energy technologies are less than fifty grams of CO₂ equivalent per kilowatt-hour electric (kWh_e) for flash steam geothermal power plants, less than eighty grams of CO₂eq/kWh_e for projected enhanced geothermal systems (EGS) power plants, and between fourteen and 202 grams of CO₂eq per kilowatt-hour thermal for district heating systems and geothermal heat pumps.”⁴⁵ Major concerns for geothermal facilities are related to land subsidence, induced seismicity, noise pollution, biodiversity loss, and decline in groundwater levels and quality. These concerns can be managed through process alterations and comprehensive resource management, including relevant protections to lower impacts on surrounding ecosystems.⁴⁶ However, since there are several localized environmental and social conditions that are affected by geothermal facilities, comprehensive community participation must be undertaken to deliberate inclusion of geothermal energy in a 100% law.

Least harmful

Solar and wind technologies are widely considered to be least harmful because they depend upon regenerative sources of energy. These technologies are high efficiency and require lower water consumption for manufacturing in comparison to fossil fuels.⁴⁷ The two technologies are instrumental for the transition away from fossil fuels. However, solar panels and wind turbines are manufactured with materials that require surface mining, such as lithium, silver, silicon, aluminum, and cobalt. The majority of these minerals are found in the Global South, in countries such as Chile, Peru, Mexico, Guinea, Democratic Republic of Congo, and in many cases on Indigenous land.⁴⁸ According to an analysis by the Climate and Community Project, seventy-nine percent of known lithium deposits in the United States sit within thirty-five miles of Native American reservations.⁴⁹ The predicted increase in demand for these technologies will accelerate mining operations for these raw minerals, which will have land use, labor, community displacement, water contamination, and loss of biodiversity implications.⁵⁰ With limited regulations on mining to protect frontline communities, surrounding water bodies, and biodiversity in the United States and in the Global South, this upsurge in mining could further threaten human rights and Indigenous sovereignty.⁵¹



Path Forward

100% laws are one of the tools available for the energy transition that have the potential to advance energy justice. The key characteristic of this policy mechanism is mandating an increase in reliance upon renewable energy in the energy system in order to decrease greenhouse gas emissions caused by burning fossil fuels. The analysis in this section demonstrates that the definitions for renewable energy in the analyzed 100% laws (1) allow for inclusion of several pernicious energy technologies, and (2) that all technologies contain the potential to harm communities. Utilization of the most harmful technologies not only fails to address the primary goal of emissions reductions, but also replicates social and environmental damages perpetrated by fossil fuels. A reckoning on the negative impact of these technologies is direly needed and must be demanded. A set of principles must be adopted by jurisdictions in order to guide the decision making on which technologies to develop and how to develop them. Such principles are exemplified in the *People's Agreement on Climate Change and the Rights of Mother Earth*.⁵² Different regions may vary in application of these principles to honor and uplift community demands and needs for reparations; however, the underlying principles must be united in their commitment to justice.

DEFINITION OF MARGINALIZED COMMUNITIES

A key step for jurisdictions transitioning to 100% laws is ensuring that marginalized communities are considered. At best, these laws will allocate benefits specifically to marginalized communities instead of the minimal consideration of focusing solely on preventing disproportionate harm.

Most jurisdictions use a mix of policy mechanisms to address concerns of disproportionate harm to marginalized communities, ranging from disproportionate or negative impact analyses to resource allocation requirements. Jurisdictions that require funding or programs that explicitly benefit marginalized communities either use income as a determinant or use a mix of socioeconomic factors and/or environmental, energy, and climate justice concerns. Jurisdictions that have developed cumulative indices that address socioeconomic, environmental, energy, and climate injustice generally have developed these indices after extensive community engagement sessions with advocacy organizations and environmental justice communities—this is a best practice for developing such definitions, and should also be utilized to prioritize program funding and benefits aligned with community priorities.

Three broad approaches are considered in order to define and intervene in marginalized communities for 100% laws - the “business as usual” approach, where marginalized communities are ignored; the economic and income-targeted approach with corresponding narrow policy interventions; and the cumulative impacts and comprehensive policy intervention approach.

As seen in **TABLE 2**, there is a wide range of approaches to analyzing and addressing potential negative impacts on marginalized communities as a result of these 100% laws, each with strengths and weaknesses.

Jurisdictions that have developed cumulative indices that address socioeconomic, environmental, energy, and climate injustice generally have developed these indices after extensive community engagement sessions with advocacy organizations and environmental justice communities—this is a best practice for developing such definitions, and should also be utilized to prioritize program funding and benefits aligned with community priorities.

TABLE 2: APPROACH TO MARGINALIZED COMMUNITIES DEFINITION

		Jurisdiction	Marginalized Community Definition	Policy Mechanisms	Policy Interventions
Approach	Business as usual	Hawaii	N/A	N/A	N/A
		Nevada	N/A	N/A	N/A
	Income-based definition	District of Columbia (D.C.)	<ul style="list-style-type: none"> Low- and moderate-income households 	<ul style="list-style-type: none"> Prioritize benefits Flexible funding allocation 	<ul style="list-style-type: none"> Narrow policy interventions
		Maine	<ul style="list-style-type: none"> Low- and moderate-income residents Vulnerable communities (undefined) 	<ul style="list-style-type: none"> Encourage diversity Consideration of negative impacts Minimize harmful impacts Strict funding allocation 	<ul style="list-style-type: none"> Narrow policy interventions
		New Mexico	<ul style="list-style-type: none"> Affected communities, defined by workforce and economic sector displacement 	<ul style="list-style-type: none"> Encourage diversity Strict funding allocation 	<ul style="list-style-type: none"> Narrow policy interventions
		Puerto Rico	<ul style="list-style-type: none"> Low-income consumers 	<ul style="list-style-type: none"> Consideration of negative impacts 	
	Cumulative index definition	California	<ul style="list-style-type: none"> Disadvantaged communities, defined by a cumulative index 	<ul style="list-style-type: none"> Legislative intent language 	<ul style="list-style-type: none"> Weak policy interventions
		New York	<ul style="list-style-type: none"> Disadvantaged communities, defined by a cumulative index 	<ul style="list-style-type: none"> Prioritize benefits Minimize harmful impacts Strict funding allocation 	<ul style="list-style-type: none"> Expansive policy interventions
		Virginia	<ul style="list-style-type: none"> Historically economically disadvantaged communities, defined by a cumulative index 	<ul style="list-style-type: none"> Consideration of negative impacts Minimize harmful impacts Strict funding allocation 	<ul style="list-style-type: none"> Narrow policy interventions
		Washington	<ul style="list-style-type: none"> Vulnerable populations, defined without specific indicators Highly impacted communities, defined by a cumulative index 	<ul style="list-style-type: none"> Legislative intent language Consideration of negative impacts Minimize harmful impacts Prioritize benefits 	<ul style="list-style-type: none"> Expansive policy interventions

TABLE 2: State approaches to defining marginalized communities and policy intervention mechanisms for ameliorating distributive inequalities on marginalized communities, due to implementation of the state's 100% laws.

Business-as-usual Approach

Nevada makes no reference in statute to marginalized, vulnerable, or disadvantaged communities, environmental injustice, or the just transition. Additionally, Nevada does not allocate any funding or require consideration of low-income or otherwise vulnerable populations. This business-as-usual approach could potentially allow for agency implementation of the laws to center justice, identify marginalized communities, and prioritize the impacts and outcomes identified by marginalized communities. However, there is no legislative requirement or guidance for incorporating justice and equity. Similarly, there is no requirement that such measures incorporate community priorities. In jurisdictions that do not reference marginalized communities or disproportionate impacts, there is no statutory handhold for organizations or citizens to leverage. This impacts their ability to advocate for implementing agencies to consider and address disproportionate impact on marginalized communities. Advocacy in these states may focus on consideration of justice and equity concerns at implementing agencies.

This business-as-usual approach could result in either no action taken around equity or definition of marginalized communities; a stalemate around defining marginalized communities; or procedural reporting requirements without tangible outcomes that improve living conditions for marginalized communities.



Income-based Approach

Maine focuses its marginalized community definition on low- and moderate-income (LMI) persons. This is defined contextually by either the area median income or households that participate in utility, municipal, state, or federal income-based assistance programs. Importantly, Maine does not use the federal poverty line designation. This flexibility is especially important for states with significant inter-state income inequality, so that the cost-of-living and eligibility for various programs is incorporated into a definition of LMI persons. New Mexico focuses on “affected communities,” defining these communities as counties where electricity-producing facilities have closed and displaced workers, a definition that engages more closely with energy justice and U.S.-based just transition concerns.

Both the income-based definition and the economic-based definition of marginalized communities include local context and flexibility and are relatively easy to define and implement. However, using a strictly income-based definition for marginalized communities can obscure other vulnerabilities not tied to income. This could include access to wealth, home- and car-ownership, exposure to environmental pollution, and cumulative/ intergenerational impacts of marginalization. In addition, these definitions are used at the individual or household level. This approach ignores spatial impacts, such as air and water pollution, or risk of climate disasters, such as flooding or fire. This approach also ignores neighborhood community organizing and identities. In addition, the states that tend to define marginalized communities narrowly also tend to address policy solutions to disproportionate impacts in a similarly narrow fashion, focusing on workforce development and retraining programs (New Mexico) or renewable energy subscription floors (Maine).

Cumulative Impacts Approach

Finally, New York’s Climate Leadership and Community Protection Act resulted in the creation of a “disadvantaged communities” definition that includes indicators related to environmental burdens, climate change risk, population characteristics, and health vulnerabilities.⁵³ This comprehensive, cumulative index involved extensive community outreach, listening sessions, and engagement with environmental justice organizations and other stakeholders. This is complemented by a similarly multi-prong approach to policy action that seeks to maximize: (1) the reduction of emissions and co-pollutants in disadvantaged communities, and (2) environmental, public health, and economic benefits to both the state and disadvantaged communities through explicit funding carve-outs. This approach is generally used in state efforts to define environmental justice communities and create mapping tools that show

individual and cumulative burdens of environmental, energy, and climate justice concerns.⁵⁴ This comprehensive approach can lead to political decisions that reduce the impact of this funding, such as California's decision to exclude race and ethnicity from consideration in defining disadvantaged communities. The case in California is complicated by Proposition 209, which was passed in 1996, and prohibits state and local entities from using race, ethnicity or sex as criteria in public employment, public contracting and public education.⁵⁵ This approach can also create more complexity in matching benefits to vulnerabilities, when specific vulnerabilities might get lost in a cumulative index of indicators. For example, communities that are "disadvantaged" because of specific flooding vulnerabilities, coupled with high rental rates, might be prioritized for homeowner-initiative energy efficiency retrofits instead of specific flood programs.

Jurisdictions that pursue a cumulative impact definition for marginalized communities have the option of incorporating race and ethnicity into these definitions, though not all jurisdictions have done so. Including race and ethnicity is a key requirement for energy justice to serve racial justice through policy. Recognition of the historical, cumulative, intertwined, and complex nature of racism, pollution, and health in the United States is the first step towards undoing the structures and institutions that perpetuate inequality along racial lines.

Conclusion

Using the framework created in IEJ's *Justice in 100 Scorecard*, this report demonstrates that the ten earliest 100% laws vary significantly in their ability to advance energy justice across five indicators: *Process, Restoration, Decision-Making, Benefits, and Access*. Some laws are leaders for a specific indicator, as in DC and New Mexico's approach to benefit, or Virginia and Maine's approach to decision making. Overall, New York and Washington demonstrate the highest relative commitment to energy justice across all five indicators. Notably, every law includes harmful energy technologies in its definition of renewable energy, perpetuating harms to primarily BIPOC, low wealth, and Global South frontline communities that already bear disproportionate health and environmental impacts. The report also identifies three broad approaches to defining and intervening in marginalized communities in the context of 100% renewable energy policies - the "business as usual" approach, where marginalized communities are ignored; the economic and income-targeted approach with corresponding narrow policy interventions; and the cumulative impacts and comprehensive policy intervention approach. IEJ's *Justice in 100* report unearthed several questions that must be further explored and addressed through advocacy, policymaking, and research. These questions include the impact of varying terms used to set goals, such as net zero, zero, and/or carbon neutral; noncompliance penalties and the necessity of their inclusion in meeting RPS targets; passthrough costs of early retirement of nonrenewable resources; energy transition costs; the creation and expansion of programs; role of distributed, community owned, and governed energy; and the impact of mining, transmission, and new generation resources for renewable energy development on Indigenous communities.

Tracing 100% laws from their origin as a low percentage RPS to the collection of state-level climate legislation analyzed in this report affirms that their ultimate goal is to advance renewable energy, not to deliver energy and environmental justice. Despite this limited legal framing, some of these laws have begun to grapple with the intersection of energy and justice. Advocacy by Washington's Front and Centered coalition created changes to the public interest statement, defined in Washington's 100% law, so that it now includes the "equitable distribution of energy benefits and reduction of burdens to vulnerable populations and highly impacted communities."⁵⁶ This is a major step forward in the fight for energy justice, as it sets the precedent that energy policies must not only consider the environment but must also take into account the economic, social, and health impacts of energy policies on marginalized communities. 100% laws are not a one size fits all solution.

In addition to the historical and structural limitations of 100% laws, communities across the country face steep obstacles in jurisdictions where corporate actors and utilities hold sway over regulators and politicians, and basic energy justice programs like bill assistance programs are lacking. These conditions make it difficult to stretch even the most ambitious RPS into one that can shift paradigms to advance justice.

The content of this report is presented with the hopes that it can inform advocates on how they can best allocate their resources and direct efforts. With this information, some advocates may redefine how they engage with 100% laws, engage more fully into other types of legislation, or dedicate themselves to strategies outside the policy realm altogether.

Those who are intimate with the needs of their communities and the barriers that stand before them are best equipped to determine the extent that 100% laws should be included in their state-level strategy for energy justice.

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AUTHORSHIP

Many IEJ staff had a hand in shaping *Justice in 100* over its lifetime. This report was primarily written by Aditi Bansal, Haley Havens, and Marisa Sotolongo. It builds on IEJ's *Justice in 100 Scorecard* produced in 2020 by Cecilia Bolon, Subin DeVar, Marisa Sotolongo, and Talia Lanckton, as well as IEJ's *Justice in 100 Case Studies (Beta Version)* authored in 2021 by Haley Havens, Kristen Kortick, and Melissa Sonntag. Antonio Coronado and Zainab Illumoka supported the application of the scorecard framework to evaluate legislation by providing preliminary legal analysis and scoring.

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Appendix

This report applies the scorecard framework presented in the 2020 [Justice in 100 Scorecard](#) to evaluate the first ten 100% laws in the U.S. Key findings shared in this report synthesize numerical and narrative scores released in the [Justice in 100 Case Studies \(Beta Version\)](#) in late 2021. Use the links below to access scorecard summaries for each law.

Scorecard Summaries

[California](#) (SB100)

[District of Columbia](#) (Law 22-257)

[Hawai'i](#) (HB623)

[Maine](#) (LD1494, LD1679, LD1711)

[Nevada](#) (SB358)

[New Mexico](#) (SB489)

[New York](#) (SB6599)

[Puerto Rico](#) (SB1121)

[Virginia](#) (HB1526)

[Washington](#) (SB5116)

Endnotes

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