




AUCTION DESIGN AND THE SOCIAL IMPACT OF RENEWABLE ENERGY PROJECTS



SCALING UP RENEWABLE ENERGY (SURE)

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An aerial photograph of a rural community. In the foreground, a large array of solar panels is mounted on a metal frame. To the right, a white utility shed with a solar panel array on its roof is visible. A red ladder leans against the shed. In the middle ground, a white SUV is parked on a dirt road. To the left, a two-story house with a red roof and a smaller brick structure are visible. The background features rolling hills and a prominent mountain peak under a clear sky. A red vertical bar is on the left side of the image, and white decorative lines are in the top right corner.

AUCTION DESIGN AND THE SOCIAL IMPACT OF RENEWABLE ENERGY PROJECTS



Renewable energy auctions have successfully captured price decreases for renewable energy and storage, triggered private investment in new generation capacities, helped countries meet international climate commitments, and increased the transparency of procurement processes compared to negotiated procurement.¹

In 2020, 22 countries around the world held auctions leading to the award of 70 gigawatts (GW) of capacity. This increasing adoption of auctions will be pivotal to scaling up renewable energy development in line with the 1.5°C climate ambition.² According to estimates by the International Renewable Energy Agency (IRENA), renewable power installed generation capacity will need to expand from its current 2,500 GW to more than 27,700 GW by 2050, more than a tenfold increase. In annual terms, this requires more than 840 GW of new renewable capacity additions every year, up from around 200 GW added in recent years.³

Policymakers have many objectives for auctions such as reaching renewable energy targets, lowering generation costs, supporting the integration of renewable energy, building local industries, and ensuring awarded projects are environmentally and socially sustainable. Although auctions can yield low prices, in the absence of measures requiring bidders to evaluate their project's impact, auctions might be less likely to deliver projects that have a positive impact on a local community.

This report discusses the relevance of the social impacts of renewable energy projects for auction design, presents an overview of auction design elements and outside measures that address social impacts, and concludes with recommendations for policymakers that seek to promote the social benefits of awarded projects. This report features case studies and examples from countries such as Mexico and Colombia where USAID has implemented energy projects and draws on interviews with local experts in additional countries such as South Africa.

This report is part of the USAID Renewable Energy Auctions Toolkit developed under USAID's Scaling Up Renewable Energy (SURE) project, which helps energy stakeholders design and implement successful energy auctions.⁴ This report focuses specifically on measures within the auction for addressing social impacts. For more background information on what auctions are and how they work, see the [USAID Renewable Energy Auctions Toolkit](#).


1 Negotiated procurement can refer to unsolicited bids (also known as "direct negotiations") or negotiated tenders. With an unsolicited bid, power producers propose a project to the government, who then selects the project. The product procured can be freely defined by the parties, including the project size, price, operational requirements, and other terms and commercial conditions of the capacity or electricity procured. Negotiated tenders foresee competitive bidding and, ideally, limit participation to serious bidders via the use of qualification criteria. "Renewable Energy Auctions Toolkit: Why Choose Auctions," USAID, <https://openknowledge.worldbank.org/bitstream/handle/10986/2346/638750PUB0Ext00Box0361531B0PUBLIC0.pdf?sequence=1&isAllowed=y> https://www.usaid.gov/sites/default/files/documents/1865/USAID_SURE_Why-Choose-Auctions.pdf

2 The 1.5°C climate ambition refers to limiting the global average temperature increase by the end of the present century to 1.5°C, relative to preindustrial levels.

3 "World Energy Transitions Outlook: 1.5°C Pathway," IRENA, 2021, https://irena.org/-/media/Files/IRENA/Agency/Publication/2021/March/IRENA_World_Energy_Transitions_Outlook_2021.pdf

4 Visit [usaid.gov/energy/auctions](https://www.usaid.gov/energy/auctions) for more information.



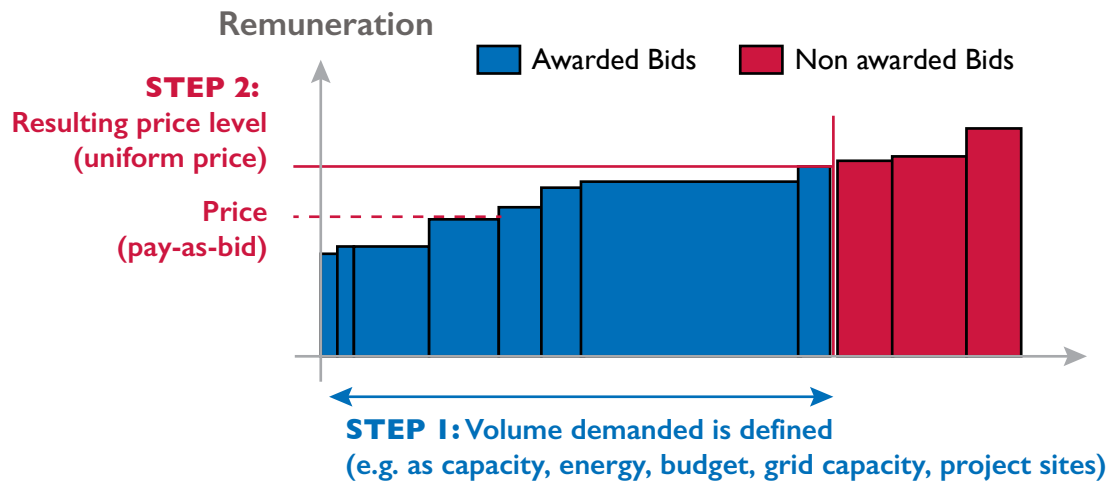
An aerial photograph of a white wind turbine in a rural landscape. The turbine is positioned in the lower right foreground, with its three blades extending across the frame. The landscape consists of a patchwork of green and yellow fields, likely corn and soybeans, with some trees and small buildings scattered throughout. In the background, there are rolling hills under a clear sky. A red vertical bar is visible on the left side of the image.

**UTILITY-SCALE RENEWABLE
ENERGY PROJECTS NEED
SIZABLE AMOUNTS OF LAND,
ESPECIALLY SOLAR PV AND
WIND PLANTS.**

I. Introduction to Auction Design

An auction is a competitive process to allocate an electricity supply contract or incentive based solely on the bids submitted by participating bidders according to transparent award rules. In an auction, the government sets the auction volume demanded (step 1 in Figure 1), bidders offer a price for their project proposals, and the auctioneer ranks bids. The resulting price level is defined either at the level at which the auction volume is met by the ranked bids (uniform pricing) or by each bid (pay-as-bid) (step 2 in Figure 1).

FIGURE 1: Price information and supply contract or incentive allocation in auctions



Auctions involve a preparation process (see Figure 2). Defining policy objectives to be achieved with the auction and knowing the renewable energy volume potential the market can deliver, the regulatory framework (*i.e.*, permitting and zoning regulation), the project development cycles, and the available institutional capacities support the design of auctions that fit the local framework conditions. This diagnosis also helps identify potential issues that may arise or worsen as a result of the renewable energy projects awarded in the auction.

Utility-scale renewable energy projects need sizable amounts of land, especially solar PV and wind plants. According to IRENA estimates,⁵ staying below 1.5°C of global warming by the end of this century will require the largest shares of installed capacities from solar PV and wind by 2050. While multi-use solutions combining solar PV and wind plants with agricultural or farming uses are emerging particularly in the United States and Europe,⁶ renewable development may still increase competition for land. Moreover, renewable energy projects tend to concentrate in locations with the lowest production costs, which may overlap with areas with unresolved community concerns around energy and infrastructure projects.

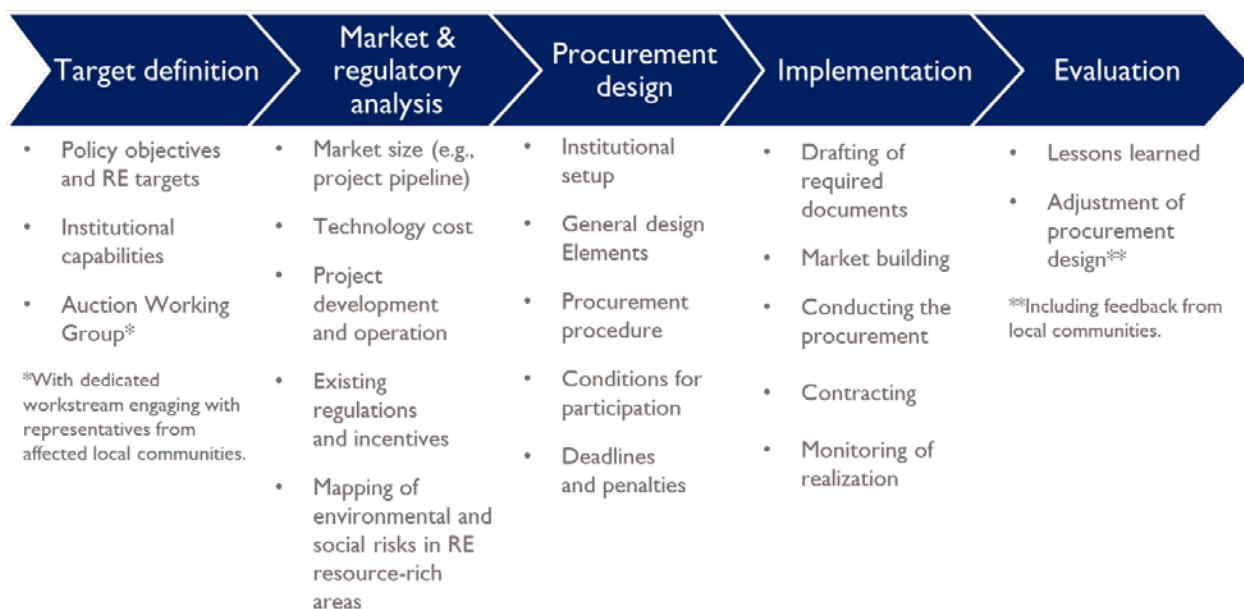
5 Solar PV and wind (onshore and offshore) would lead the way in terms of shares of installed capacities needed. In IRENA's 1.5°C Scenario, solar PV installed capacity would reach over 14,000 GW and wind (onshore and offshore) over 8,100 GW by 2050. "World Energy Transitions Outlook: 1.5°C Pathway," IRENA, https://irena.org/-/media/Files/IRENA/Agency/Publication/2021/March/IRENA_World_Energy_Transitions_Outlook_2021.pdf

6 "Should We Be Using More Land for Renewable Energy?," Renewable Energy Magazine, <https://www.renewableenergymagazine.com/emily-folk/should-we-be-using-more-land-for-20200423>

The social impacts of renewable energy projects are sometimes not taken seriously until problems arise that cause substantial delays or imperil the project's future. This can often lead to harmful outcomes for the local community and financial losses for the developers. A community may choose to challenge a renewable energy project for a variety of reasons. This may include instances where a project is perceived to have a potentially negative impact on traditionally owned land or natural resources, where there is a lack of consensus regarding compensation and/or benefit-sharing, where women are more adversely affected by or benefit less than men, and where there are potentially negative health and environmental impacts.⁷

Engaging in meaningful consultation and raising awareness on climate change with local communities as part of auction preparation by the authorities, and as part of project due diligence by the bidders, is a powerful and necessary step toward mitigating the risk of a community challenging a project. Consultation with local communities may be particularly relevant in areas where substantial renewable energy development is expected and where the government intends to auction a specific site on public land. The Communities and Renewable Energy Project (CER) in Mexico, for example, recommends that authorities approach communities and disseminate information on the consultation process; free, prior and informed consent (FPIC) for Indigenous communities; and best practices concerning participation mechanisms on renewable energy projects.⁸ Engaging with local communities early can inform changes that may be needed to zoning and permitting processes, as well as the development of guidelines and/or requirements for community consultation and benefit-sharing.

FIGURE 2: Overview of the auction design and implementation process



7 "Guide to Community Engagement for Power Projects in Kenya," USAID, https://www.usaid.gov/sites/default/files/documents/1860/FINAL_Guide_to_Community_Engagement_-_Jan_17_2018_508-compressed.pdf

8 "Lineamientos para el desarrollo de proyectos de energía renovable: Participativos, Incluyentes y Transparentes (Renewable Energy Development Guidelines: Participatory, Inclusive and Transparent)," CER, <https://proyectocer.org/assets/img/Lineamientos-Final-web.pdf>



2. Social Impact of Renewable Energy Projects

The use of renewable energy is a key component of the CO₂ emissions abatement needed to stay below 1.5°C of global warming by the end of this century. Building renewable energy can be a powerful step toward diversifying a country's electricity mix or bringing electricity access to underserved communities. However, all infrastructure projects regardless of their energy source affect the local community where they are sited. The most accessible renewable energy resources are often in rural areas due to their lower population density. Communities that can be affected include people living close to the project site or the associated grid infrastructure, which can include marginalized groups who are less likely to be consulted and informed on renewable energy projects or to have their voices heard. This puts them more at risk of losing control over the use of land and resources. In some countries, Indigenous peoples may be living close to project sites, such as in the Yucatan and Oaxaca in Mexico, parts of the Western United States, and La Guajira in Colombia. As these communities are already disproportionately affected by other historical injustices, consultation becomes even more important but also more difficult due to mistrust, language barriers, and complex land rights. Therefore, a robust process for engaging with local communities helps ensure the social feasibility of awarded projects.

In many cases, national authorities and international development finance institutions (DFIs) require that developers complete studies documenting the potential social and environmental impacts of the projects they finance and plan for their mitigation. In particular, national authorities and DFIs may require power producers to complete environmental and social impact assessments (ESIAs)⁹ and environmental and social management plans (ESMP), and many countries conduct more comprehensive strategic environmental assessments (SEAs) to assess the impact of their policies. However, there is a risk that these studies often appear to be treated more as a bureaucratic or check-the-box exercise in service of moving forward with the plant's development.

⁹ Some countries continue to use "Environmental Impact Assessment" (EIA) as a term but clarify that "environment" is inclusive of the human environment, and thus impacts are inclusive of social impacts. "Social Impact Assessment and International Good Practice," USAID, <https://www.usaid.gov/environmental-procedures/environmental-compliance-esdm-program-cycle/social-impact-assessment>.

BOX I: MEANINGFUL CONSULTATION AND FREE, PRIOR AND INFORMED CONSENT (FPIC)

MEANINGFUL CONSULTATION

Meaningful consultations with local communities help ensure that the communities understand the scope of planned projects, that the potential negative impacts are understood, monitored, and mitigated, and that a benefit-sharing strategy is discussed. USAID's Power Africa Guide to Community Engagement for Power Projects in Kenya defines community engagement as a full suite of communication and direct interaction activities with affected communities that, ideally, leads to community consent for a project. This approach includes the dissemination of information, targeted consultation with local leaders and representative groups, collaborative decision-making, and perhaps even community co-design of the project.¹ Engagement with local communities can be through different means of communication that range from informal conversations to a deeper level of meaningful consultation, where stakeholders can affect the outcome of an issue, process, design, or any other question under discussion.² USAID's Policy on Promoting the Rights of Indigenous Peoples highlights essential elements of meaningful consultation with Indigenous peoples.³

FREE, PRIOR AND INFORMED CONSENT

For communities identified as Indigenous peoples, the principles of free, prior and informed consent (FPIC) should be upheld at all times following international standards.⁴ Free, prior and informed consent refers to the idea that before ("prior") an action takes place that would affect Indigenous peoples, positively or negatively, the person or community must freely ("free") approve of the activity moving forward ("consent"). The person or community must have full information ("informed") regarding the activity; otherwise, the consent is meaningless. This is a best practice and may be a legal requirement for USAID projects that have an impact on land, territory, or resources belonging to or used by Indigenous peoples.

A consultation process consistent with FPIC is required when Indigenous peoples are present in or have a collective attachment to the project area and there is: (1) risk of adverse impacts on the human rights, means of subsistence, and/or culture of Indigenous peoples; (2) potential for adverse impacts on land, natural resources, and sacred sites (whether the land is under traditional ownership title or based on customary use and occupation); or (3) a threat that might result in the need to relocate from those lands.⁵

1 "Guide to Community Engagement for Power Projects in Kenya," USAID, https://www.usaid.gov/sites/default/files/documents/1860/FINAL_Guide_to_Community_Engagement_-_Jan_17_2018_508-compressed.pdf

2 "USAID Policy on Promoting the Rights of Indigenous Peoples," USAID, <https://www.usaid.gov/sites/default/files/documents/1866/USAID-IndigenousPeoples-Policy-mar-2020.pdf>

3 "USAID Policy on Promoting the Rights of Indigenous Peoples," USAID, <https://www.usaid.gov/sites/default/files/documents/1866/USAID-IndigenousPeoples-Policy-mar-2020.pdf>

4 "Guide to Community Engagement for Power Projects in Kenya," USAID, https://www.usaid.gov/sites/default/files/documents/1860/FINAL_Guide_to_Community_Engagement_-_Jan_17_2018_508-compressed.pdf

5 "Effective Engagement with Indigenous Peoples: USAID Energy and Infrastructure Sector Guidance Document," USAID, https://scms.usaid.gov/sites/default/files/documents/1866/DCHA_Indigenous_Peoples_Energy_and_Infrastructure_Guidance_Document_-_FINAL.PDF



Social impacts on the economy include local value creation in the form of job creation in the value chain and potential co-ownership of the project and/or benefit-sharing between the renewable energy producer and the local community.

Donors such as USAID also require environmental and social impact studies to be completed before the implementation of new energy sector activities.¹⁰ USAID's energy sector activities generally provide technical assistance toward a country's policy development of renewable energy and transaction advisory for new auctions, but generally do not lend directly to new projects.

Box 2 briefly defines ESIA's and ESMP's as a tool used by authorities at the national level and provides examples of environmental and social standards used at the international level. Note that in many cases, there are specific policies and safeguard standards for Indigenous peoples.¹¹

While environmental¹² and social impacts of renewable energy projects are typically assessed jointly, this report focuses exclusively on the social impacts of renewable energy projects awarded in auctions.¹³ Social impacts refer to changes from the baseline condition, as a result of a renewable energy project, to individuals and communities in the way they live, work, play, relate to one another, organize, and manage as members of their society.¹⁴ Examples include impacts on the land and resource tenure rights, the risk of temporary or permanent resettlement, the exacerbation of social conflict, access to reliable local electricity supply, health impacts, and impacts on the economy of the community where the project will be located.¹⁵ Social impacts on the economy include local value creation in the form of job creation in the value chain and potential co-ownership of the project and/or benefit-sharing between the renewable energy producer and the local community.

10 USAID follows 22 CFR 216 (Reg 216). "22 CFR 216: USAID'S EIA Process," USAID, <https://www.usaid.gov/environmental-procedures/environmental-compliance-esdm-program-cycle/22-cfr-216-usaid-eia-process>

11 Examples include the World Bank's Environmental and Social Standards (ESS), "ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities," World Bank, <https://thedocs.worldbank.org/en/doc/276101511809520481-0290022017/original/EnvironmentalSocialStandardESS7FactSheetVVBESF.pdf> and "USAID Policy on Promoting the Rights of Indigenous Peoples," USAID, <https://www.usaid.gov/sites/default/files/documents/1866/USAID-IndigenousPeoples-Policy-mar-2020.pdf>

12 While the report focuses on social aspects and not environmental aspects, ecosystem change and biodiversity loss are of also of high importance for local communities. The Millennium Ecosystem Assessment (MA) framework lists habitat loss/change, pollution, overexploitation, climate change, and introduction of invasive species as key drivers of ecosystem change and biodiversity loss.

13 For more information on the environmental aspects of the assessment, visit the EIA Principles website. <https://www.usaid.gov/environmental-procedures/environmental-compliance-esdm-program-cycle/principles-eia>

14 "USAID Optional Social Impact Assessment Framework," USAID, <https://www.usaid.gov/sites/default/files/documents/1866/USAID-Social-Impact-Assessment-508.pdf>

15 "USAID Environmental Impact Assessment Tool," USAID, https://www.usaid.gov/sites/default/files/documents/1860/EIA_Tool_Revised_4Dec2017_FINAL.pdf

BOX 2: EXAMPLES OF INSTRUMENTS USED AT THE NATIONAL AND INTERNATIONAL LEVEL TO ASSESS THE ENVIRONMENTAL AND SOCIAL IMPACT OF POWER PROJECTS

INSTRUMENTS AT THE NATIONAL LEVEL

ESIAs assess the potential environmental and social impacts of a proposed project, evaluate alternatives, and suggest mitigation, management, and monitoring measures. **ESMPs**¹ ensure power producers adhere to the commitments made in the ESIA to mitigate adverse impacts and enhance beneficial impacts of the project.

INSTRUMENTS AT THE INTERNATIONAL LEVEL

Examples of standards defined by DFIs:²

- International Finance Corporation (IFC): Performance Standards on Environmental and Social Sustainability³
- World Bank Group: Environmental, Health and Safety Guidelines (EHS Guidelines)
- Instruments used to assess social impacts include: Environmental and Social Management Plan (ESMP), Environmental and Social Management Framework (ESMF), Environmental and Social Management System (ESMS), Resettlement Plan (RP), Indigenous Peoples Plan (IPP)
- Several national and international financial institutions⁴ have adopted the Equator Principles (EP), which are based on the IFC's Performance Standards. Environmental and social impacts, including gender, Indigenous peoples, and other human rights impacts, as well as climate change impacts of proposed projects,⁵ are part of the scope of review of participating institutions. For climate change risk assessments, DFIs use the World Bank's Climate and Disaster Risk Screening Tool.⁶

STRATEGIC ENVIRONMENTAL ASSESSMENTS (SEAS)

A Strategic Environmental Assessment (SEA) evaluates the environmental implications of a proposed policy, plan, or program looking at its cumulative effects.⁷ For example, in a wind auction, two or three projects may be awarded close to each other. A project individually may comply with an ESIA, but cumulatively the project may result in a breach of environmental law. Examples of international frameworks on SEAs include the SEA Protocol to the UNECE Convention on Environmental Impact Assessments (EIA) in a Transboundary Context⁸ and the Directive 2001/42/EC of the European Parliament and the Council on the Assessment of the effects of certain plans and programs on the environment.⁹

1 Depending on the requirement of the bank, an ESIA and an ESMP report could be either integrated in one report or prepared separately as two reports.

2 Further examples include the Asian Development Bank's (ADB) "Environmental Assessment," the African Development Bank's (AfDB) "Safeguards and Sustainability Series," and the European Bank for Reconstruction and Development's (EBRD) "Performance Requirements".

3 The U.S. International Development Finance Corporation (DFC) generally uses the IFC Performance Standards. <https://www.dfc.gov/what-we-offer-eligibility-our-investment-policies/environmental-and-social-impact-assessments>

4 Currently, 116 financial institutions in 37 countries have adopted the Equator Principles, applicable to project finance with total project costs of \$10 million or above. "EP Association, Members and Reporting," Equator Principles, <https://equator-principles.com/members-reporting/> and "Equator principles 4 enter into force: What will this mean in practice?", Norton Rose Fullbright, <https://www.nortonrosefullbright.com/en/knowledge/publications/3a6e7a7b/equator-principles-4-enter-into-force-what-will-this-mean-in-practice>

5 "The Equity Principles July 2020", Equator Principles, <https://equator-principles.com/wp-content/uploads/2020/01/The-Equator-Principles-July-2020.pdf>

6 "Climate & Disaster Risk Screening Tools-Energy Projects," World Bank Group, <https://climatescreeningtools.worldbank.org/energy-welcome>

7 "Strategic Environmental Assessment," European Union, [https://europa.eu/capacity4dev/public-environment-climate/wiki/strategic-environmental-assessment#:~:text=A%20Strategic%20Environmental%20Assessment%20\(SEA,making%20alongside%20economic%20and%20social](https://europa.eu/capacity4dev/public-environment-climate/wiki/strategic-environmental-assessment#:~:text=A%20Strategic%20Environmental%20Assessment%20(SEA,making%20alongside%20economic%20and%20social)

8 "Protocol on Strategic Environmental Assessment to the Convention On Environmental Impact Assessment in a Transboundary Context," UNECE, <https://unece.org/fileadmin/DAM/env/eia/documents/legaltexts/protocolenglish.pdf>

9 "DIRECTIVE 2001/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment," EU, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001L0042&from=EN>



3. Relevance of Social Impacts of Renewable Energy Projects for Auction Design

Addressing social impacts in auctions has important benefits such as increasing the local acceptance of awarded projects and helping mobilize investment for the capacities procured.

Local acceptance of awarded projects. Opposition to renewable energy projects may stem from unresolved community concerns regarding the impact on land and natural resources, the risk of resettlement, or local beliefs¹⁶ that stand in opposition to larger industrial structures such as wind turbines, particularly in areas with highly fragmented or contested ownership or situations where the community has not been sufficiently consulted. Opposition by the community may require the bidder to change the original plant design, which may result in additional project costs or lower revenues. Ensuring awarded projects are accepted by the local community can lower this risk and facilitate the land acquisition process.

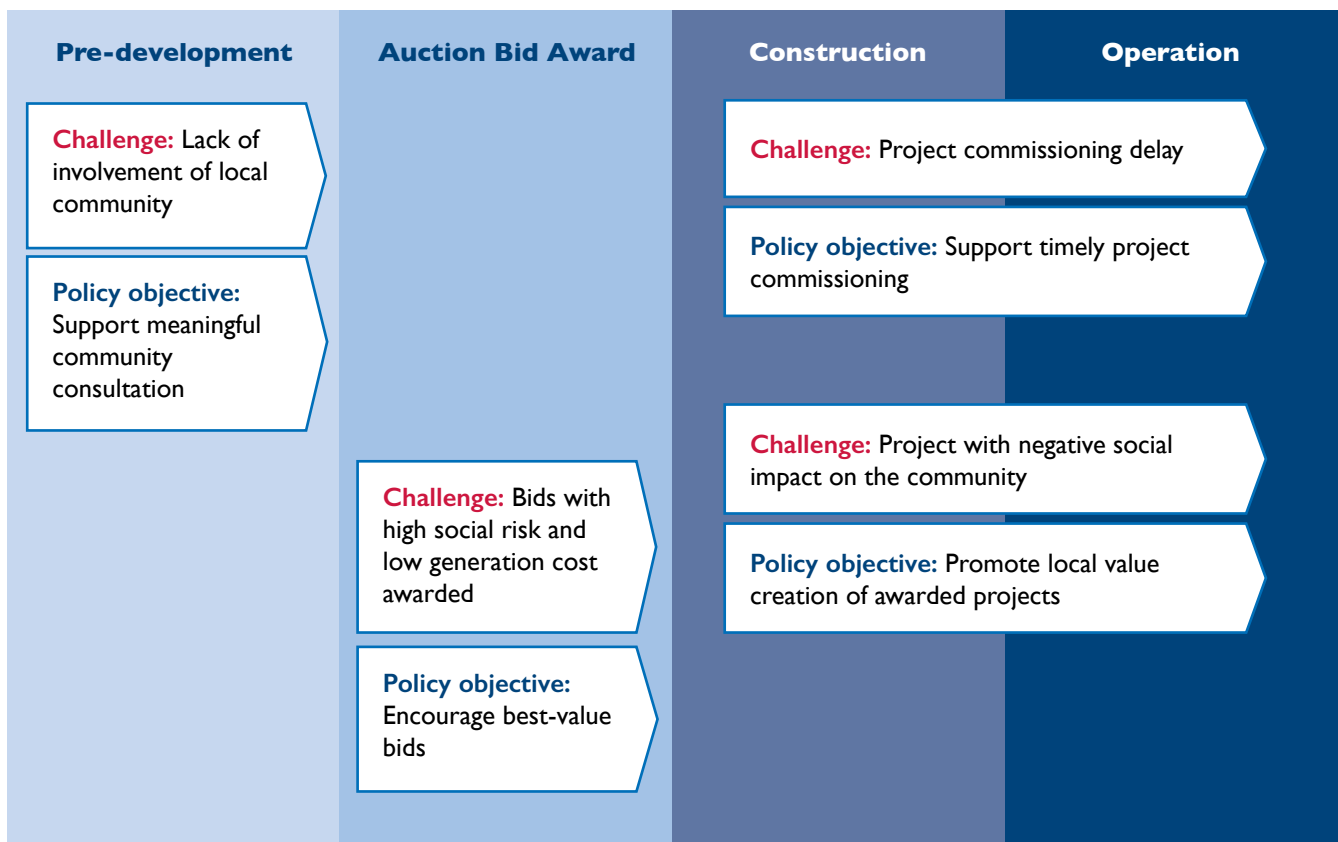
Mobilizing investment. Development financial institutions and investors with stringent social impact standards will not be able to invest in projects that have not properly consulted the community, which reduces the pool of available financing, increasing financing costs and bid prices. Ensuring projects participating in an auction address social impacts can also support the bankability of projects.

To address challenges that may arise during the lifetime of a project, policymakers can define objectives for the auction to target the award of socially sustainable projects. Table 1 presents an overview of policy objectives and potential challenges they tackle along the lifetime of a project. In reality, defining one policy objective for the auction can help address more than one challenge. For example, promoting local value creation of awarded projects likely reduces the opposition of the community to the project.

¹⁶ Beliefs may include culture, religion, traditional practices or vision of development with respect to the territory.



FIGURE 3: Overview of policy objectives and potential challenges during the project lifetime





Timely project commissioning of awarded projects. Social conflict in the project planning and construction stages may bring a project to a halt, which may lead to bankruptcy for the project developer, delayed electricity supply, and disruptions in the industry value chain for the government. Moreover, building projects significantly later than envisioned also means that commissioned projects do not reflect market prices anymore. Community engagement can ease the project development process by addressing community concerns early. Preparing an ESIA of sufficient quality, either by the bidder in bidder-sited auctions or by the authorities (and the bidder) in government-sited auctions¹⁷, helps ensure awarded projects are developed in a manner that is socially responsible and that bids incorporate the cost of assessing and managing the potential social impacts of the project.

Encouraging best-value bids. While cheap auction prices support the financial sustainability of an auction program and can lower electricity prices for consumers, awarding the cheapest projects without considering bid quality increases the risk of project delay and can exacerbate social conflict around renewable energy development, thereby conflicting with other national and international development goals such as local economic development. Best-value bids refer broadly to projects that assess and mitigate negative social impacts or are committed to creating local value or shared benefits from the project with the local community.

Local value creation of awarded projects. Local communities may reject renewable energy projects if they are deemed to have costs for the community (e.g., negative impact on tourism, loss of property value), while the benefits like job opportunities accrue outside of the community. An example would be when a solar power project is built in a community but the electricity produced will be delivered to the faraway capital city. Encouraging the utilization of local components, labor, and services for the project construction or operation stages and offering local investment opportunities in projects can support the achievement of this policy goal.

¹⁷ In government-sited or site-specific auctions, the project site is selected and pre-developed, either partially or fully by the government, as opposed to by the bidder. For more background information on what auctions are and how they work, see the USAID Policymakers Guide: https://www.usaid.gov/sites/default/files/documents/1865/USAID_SURE_Designing-Renewable-Energy-Auctions-Policymakers-Guide.pdf



4. Measures to Address the Social Impacts of Awarded Renewable Energy Projects

There are measures within and outside the auction that can mitigate the risk of negative social impacts and encourage benefit-sharing and/or local value creation in the communities where projects are located. Measures within the auction refer to design elements that directly influence the outcome of the auction. Supportive measures outside the auction encompass mechanisms other than auction design elements that mitigate adverse impacts and enhance beneficial social impacts of awarded projects. Figure 4 presents an overview of measures to address the social impacts of renewable energy projects.

FIGURE 4: Overview of measures to address the social impacts of renewable energy projects

Measures within the auction	Conditions for participation	Project development requirements (ESIA, proof of community engagement)	Commitment to local value creation / social inclusion	Benefit-sharing requirement
	Preferential auction rule	Preferential quota	Preferential bonus	
	Bid award criteria	Multi-criteria selection		
	Penalties	Penalties to back contract performance conditions		
Measures outside the auction	Social impact regulation	Auction Working Group	Measures to facilitate compliance with regulation	Local value and benefit-sharing measures

4.1 Measures within the auction

Conditions for participation in the auction encompass the requirements bidders or projects need to meet to participate in the auction, including project development requirements or a commitment to benefit-sharing and/or local value creation. Project development requirements involve standardized evidence of project progress, for example, an environmental and social impact assessment (ESIA) or proof of community engagement.

ESIAs or similar social impact assessments are required of power producers in several countries either before or after a project has been awarded in an auction. In Mexico, the social impact assessment (Evaluación de Impacto Ambiental, Evis) was considered a condition for participation in the fourth auction round, instead of a post-award requirement,¹⁸ but the auction was canceled early in 2019.¹⁹ Evidence of community engagement is a condition for participation in the state of Victoria's Renewable Energy Target Auction (VRET) scheme in Australia. Required documentation includes a social risk analysis, community engagement strategies, benefit-sharing programs, monitoring and evaluation plans, and letters of support.²⁰

Defining project development requirements creates a higher probability of timely commissioning because the projects participating in the auction have already considered and priced in the costs of enhancing or mitigating expected social impacts. However, defining these requirements may increase the cost of participation (and sunk costs for non-awarded bidders) and the time needed by bidders to conduct the required assessments before the auction. An option to balance the risk of negative social impacts and avoid overburdening bidders is to require a preliminary social impact evaluation and evidence of community engagement as a condition for participation that can be finalized after projects are awarded. To ensure that successful bidders finalize the social impact evaluation and conduct robust community engagement after the auction, penalties can be defined in the form of a financial guarantee or by tying the granting of licenses to the successful completion of these processes.

Participation in an auction can also be conditional on projects showing a commitment to social inclusion or local value creation through the use of national or more local (*i.e.*, from the community) labor, in case the project is awarded. Namibia included social inclusion criteria in its solar PV auction for a 37-MW project in 2016. Proposed projects had to meet a minimum of 30 percent shareholding by disadvantaged groups, including women and individuals with disabilities, as a condition for obtaining a generation license.²¹ The project is 51 percent owned by Alten Africa, 19 percent owned by the utility NamPower, and 30 percent owned by local women-owned companies First Place, Mangrove, and Talyeni.²²

Saudi Arabia defined a Local Content Mechanism requiring bidders in its solar PV auction to obtain a score of at least 17 percent in projected local spending. The score is obtained by dividing local spending by the total project capital expenditures (CAPEX). Authorities made a calculation template available to bidders listing eligible local

18 "Renewable Energy Auctions: Status and Trends Beyond Price," IRENA, 2019, https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Dec/IRENA_RE-Auctions_Status-and-trends_2019.pdf

19 "Mexico cancels fourth energy auction," PV Magazine, <https://www.pv-magazine.com/2019/02/01/mexico-cancels-fourth-energy-auction/#:~:text=After%20being%20E2%80%9Ctemporarily%20suspended%E2%80%9D%20in,economic%20and%20energy%20planning%20considerations>.

20 "Second VRET Auction Consultation Paper," Victoria State Government: Environment, Land, Water and Planning, https://www.energy.vic.gov.au/_data/assets/pdf_file/0045/488997/VRET-2-market-sounding-consultation-paper.pdf

21 "Namibia Country Report," Applied Research Programme on Energy and Economic Growth (EEG), <https://energyeconomicgrowth.org/publication/namibia-country-report>

22 "Alten Africa secures \$50 million for 45 MW PV project in Namibia," PV magazine, <https://www.pv-magazine.com/2018/03/15/alten-africa-secures-50-million-for-45-mw-pv-project-in-namibia/>

spending categories such as labor, capacity-building, goods and services²³ (e.g., PV modules), and depreciation on assets in Saudi Arabia used for project execution.²⁴ In Turkey's wind auction in 2017, bidders were required to ensure that 80 percent of engineers employed on the project would be Turkish nationals.²⁵

Requirements for the use of local labor should be defined considering what the local market can deliver; otherwise, their use can drive up costs and importantly restrict the level of competition. The local workforce should possess the skills and knowledge needed to support the development of the sector for the requirement to work well. For countries that are in the process of building their renewable energy industry, an alternative is to require a focus on training and education, as exemplified by Denmark's auction for the Horns Rev 3 offshore wind farm. A social clause on apprenticeships ensured a certain number of trainees was used in the construction of the wind farm.²⁶

Another example is requiring benefit-sharing from the project to the local community. In Ireland's 2020 technology-neutral auction, power producers were required to set up and contribute €0.2 cents (\$0.24 cents²⁷)/kWh to a community benefit fund. The measure is estimated to deliver approximately €4.5 (\$5.37) million per year to sustainable community initiatives targeted at those communities living close to projects.²⁸ Similarly, in El Salvador, the 2014 auction required power producers to invest 3 percent of their revenue in social projects in adjacent communities.²⁹

A **preferential bonus or quota** reserved for projects with desirable social impact attributes increases the likelihood this type of project is awarded in the auction. A quota fixes a share of the auction volume reserved for projects with desired social impact attributes. A bonus can be applied to either the bid price to decrease it or to the price paid to the producer to increase its remuneration, in both cases making the bid more competitive. In France, a community participation bonus is paid on top of the auction price to projects that achieve a certain threshold of local financial participation in the project.³⁰ If community participation represents at least 40 percent of project equity, a bonus of €0.3 cents (\$0.4 cents)/kWh is paid. If community participation represents at least 10 percent of the overall project financing (i.e., equity and debt), a bonus of €0.1 cents (\$0.12 cents)/kWh is paid. In practice, bidders consider the bonus they expect to receive in their bids to make them more competitive. In Ireland's 2020 technology-neutral auction, a quota of 30 gigawatt hours (GWh), or approximately 1 percent of the auction volume, was defined for community-led projects.³¹

23 Products do not contribute 100% of their price but are multiplied with their local content score to truly reflect their localized value even if they are procured from a Saudi entity, e.g., 22 percent of purchase value of PV modules. Local content scores can be either predefined scores by the local content authority (LGCPA) or defined by third-party auditors. "The business of localization: Insights for success in the Saudi renewables market," Apricum, <https://www.apricum-group.com/the-business-of-localization-insights-for-success-in-the-saudi-renewables-market/>

24 "The business of localization: Insights for success in the Saudi renewables market," Apricum, <https://www.apricum-group.com/the-business-of-localization-insights-for-success-in-the-saudi-renewables-market/>

25 "On the way to efficiently supplying more than half of Turkey's electricity from renewables: Opportunities to strengthen the YEKA auction model for enhancing the regulatory framework of Turkey's power system transformation," SHURA, https://www.shura.org.tr/wp-content/uploads/2019/01/SHURA_Opportunities-to-strengthen-the-YEKA-auction-model-for-enhancing-the-regulatory-framework-of-Turkeys-power-system.pdf

26 "Auctions for Renewable Support in Denmark: Instruments and lessons learnt," Technical University of Denmark, https://backend.orbit.dtu.dk/ws/portalfiles/portal/124056860/pdf_denmark.pdf

27 €1 equals \$1.19 on March 16, 2021. <https://www1.oanda.com/lang/de/currency/converter/>

28 "Solar, wind and community energy projects set to deliver €1.4 billion in investment and 1,000 jobs after Government approves renewable energy auction results," Department of the Environment, Climate and Communications, Government of Ireland, <https://www.gov.ie/en/press-release/08388-solar-wind-and-community-energy-projects-set-to-deliver-14bn-in-investment-and-1000-jobs-after-government-approves-renewable-energy-auction-results/>

29 "Renewable Energy Tenders and Community [Em]power[ment]: Latin America and Caribbean," Factor, https://www.wearefactor.com/docs/LAC_REN21_ENG.pdf

30 "Auctions and renewable energy communities Measures to support RES communities in auctions – Country experiences and lessons learnt," AURES II, http://aures2project.eu/wp-content/uploads/2020/02/AURES_II_D4_2_energy_communities.pdf

31 "Solar, wind and community energy projects set to deliver €1.4 billion in investment and 1,000 jobs after Government approves renewable energy auction results," Department of the Environment, Climate and Communications, Government of Ireland, <https://www.gov.ie/en/press-release/08388-solar-wind-and-community-energy-projects-set-to-deliver-14bn-in-investment-and-1000-jobs-after-government-approves-renewable-energy-auction-results/>

BOX 3: PRICE-ONLY VERSUS MULTI-CRITERIA AUCTIONS AND THE EXPERIENCE IN SOUTH AFRICA

PRICE-ONLY VERSUS MULTI-CRITERIA AUCTIONS

Price-only auctions, whereby qualified bids are ranked from lowest to highest price and are determined on a pass-fail basis according to compliance with participation requirements, emphasize price reduction in the selection of bids. Additional advantages of price-only auctions compared to multi-criteria auctions are the simplicity of implementation for the auctioneer and bidders and the higher level of transparency and objectivity in the bid selection process. Social considerations can be addressed by defining certain conditions for participation instead of the use of multi-criteria scoring.

If multi-criteria auctions are implemented, as in South Africa, a clearly communicated methodology for evaluation and transparent scoring has proven to be important.

MULTI-CRITERIA AUCTIONS: EXPERIENCE IN SOUTH AFRICA

Economic development criteria count for 30 percent of the bid score and are split into several categories: job creation, local content, ownership, management control, preferential procurement, enterprise development, and socioeconomic development.¹ Bidders need to submit budgets for their economic development activities. Criteria are quantitatively defined; i.e., a certain number of jobs to be created or rands (local currency) to be invested in the community correspond to a specific score.²

Economic development contributions were scored on an absolute points basis in earlier rounds. In later rounds, the program used relative scoring; that is, all bids were evaluated against the bid with the highest economic development score that met or exceeded all economic development criteria.³ This methodology appears to have incentivized several bidders to overpromise the expected economic development contributions of the projects, which in turn inflated the importance of the bid price offered.⁴

As of 2019, South Africa's auction program reported a significant collective financial commitment⁵ to criteria such as enterprise development (6.4 billion rands or approximately \$442.7 million⁶), socioeconomic development (20.6 billion rands or approximately \$1.4 billion), community shareholding (29.3 billion rands or approximately \$2 billion). The auction program also reported considerably higher employment figures than planned: 96 percent more black South African citizens and 156 percent more local community members than originally projected in bids were employed during construction.

Local-foreign partnerships have become an established option for project developers. Many internationally backed companies have established local offices in South Africa. International-local partnering and skills transfer also extended to engineering, procurement, and construction (EPC) companies. Indeed, an auction requirement is for EPC companies to have a minimum of 8 percent black shareholders and a target of 20 percent, which incentivizes partnering with large, local engineering companies.⁷

1 A detailed description of the economic development criteria used in South Africa can be found here: "South Africa Country Report," University of Cape Town, Energy and Economic Growth Research Programme, <https://energyeconomicgrowth.org/sites/eeg.opml.co.uk/files/2020-03/South%20Africa%20Country%20Report.pdf>

2 Wikus Kruger, personal communication, January 2021

3 "South Africa Country Report," University of Cape Town, Energy and Economic Growth Research Programme, <https://energyeconomicgrowth.org/sites/eeg.opml.co.uk/files/2020-03/South%20Africa%20Country%20Report.pdf>

4 Wikus Kruger, personal communication, January 2021

5 "Local Benefit Sharing in Large-Scale Wind and Solar Projects," IFC, https://www.commddev.org/wp-content/uploads/2019/06/IFC-LargeScaleWindSolar_Web.pdf

6 Dollar amounts based on May 2019 exchange rate

7 "South Africa Country Report," University of Cape Town, Energy and Economic Growth Research Programme, <https://energyeconomicgrowth.org/sites/eeg.opml.co.uk/files/2020-03/South%20Africa%20Country%20Report.pdf>

The **bid award criteria** can be solely based on price (price-only selection) or include other criteria such as local value creation, social inclusion, or benefit-sharing (multi-criteria selection). Social impacts can be addressed both in price-only and multi-criteria auctions. In a price-only auction, policymakers define social impact requirements that projects need to meet to qualify for the auction. Then, for projects that meet these social impact requirements, the award of an electricity supply contract or incentive is decided based on price only. Price-only as an award criterion is more transparent, while ensuring that awarded bids meet the requirements defined.

Malaysia applies a merit points adjustment to bid prices in its large-scale solar PV auction program. The adjustment is used to compare bid prices offered by projects that meet policy objectives better than other projects. Merit points were given to projects that **e.g.**, plan to use the land for economic activities in addition to solar generation (**e.g.**, agricultural activities).³² South Africa's auctions select projects based on a multi-criteria 70:30 split between price and economic development criteria, respectively.³³ Bids are ranked from highest score to lowest score and awarded until the auction volume is met. Table 3 discusses price-only and multi-criteria auctions and summarizes the experience in South Africa.

Penalties can be defined to back contract performance conditions aiming to ensure projects deliver on the promised risk mitigation and positive social impact measures. In South Africa, bidders signed an implementation agreement with the Department of Energy that backs bidders' economic development commitments. Projects were given half a termination point for performance below 65 percent on any economic development obligation. If a power producer received more than nine termination points over 12 months, the power purchase agreement (PPA) could be terminated, which has not happened to date. Most termination points awarded before 2019 were for projects failing to comply with their "women-owned businesses" commitments under the "preferential procurement" category.³⁴

4.2 Supportive measures outside the auction

Supportive measures outside the auction include the definition of social impact regulation, an auction working group, measures by the government that facilitate compliance with social impact regulation, and voluntary or mandatory local value and benefit-sharing measures. This type of measure can enhance the effectiveness of the measures within the auction and provide clear mechanisms for bidders to improve the social impact of their projects while interfering considerably less with the auction compared to the use of multi-criteria bid evaluation.

While the assessment of environmental impacts is required by regulation in most countries, the inclusion of social impacts in ESIA's or the definition of specific social impact regulation is less widespread. The **definition of social impact regulation** sends a clear signal to bidders on the scope and community engagement requirements expected by authorities and the communities where projects are located. A clear specification of requirements for social impact evaluations facilitates compliance by the bidder and evaluation by the authorities. Requirements may refer to the scope of the evaluation (**e.g.**, the type of social impacts to be assessed during

32 "Guidelines On Large Scale Solar Photovoltaic Plant For Connection To Electricity Networks [Electricity Supply Act (Amendment) 2015 (Act A1501)];" Suruhanjaya Tenaga Energy Commission, https://www.st.gov.my/contents/2019/LSS/Guideline%20on%20LSSPV%20for%20Connection%20to%20Electricity%20Networks_%20February%202019.PDF

33 "South Africa Country Report," University of Cape Town, Energy and Economic Growth Research Programme, <https://energyeconomicgrowth.org/sites/eeg.opml.co.uk/files/2020-03/South%20Africa%20Country%20Report.pdf>

34 "South Africa Country Report," University of Cape Town, Energy and Economic Growth Research Programme, <https://energyeconomicgrowth.org/sites/eeg.opml.co.uk/files/2020-03/South%20Africa%20Country%20Report.pdf>

project planning, construction, and operation, considering project size, technology, or the type of land ownership³⁵), and the quality standards for the methodologies used (e.g., the use of participatory processes) for the elaboration of the evaluation. For projects built on land owned by Indigenous peoples, obtaining free, prior and informed consent is a best practice and is required by international legal frameworks; national law and regulations should specify the requirements for the FPIC. The FPIC standard can be applied broadly not only to Indigenous but also to local communities as a way to hold parties to a higher standard of conduct.

BOX 4: MITIGATING SOCIAL IMPACT RISK IN MEXICO

In Mexico, the development of renewable energy projects and associated transmission infrastructure has put pressure on local communities: of the projects awarded in the auctions between 2015 and 2017, 66 percent had experienced delays or been halted as of 2019 due to social issues and/or issues in the permitting process,¹ especially projects located in Yucatan. To address legal gaps in the management of social issues on energy projects, USAID and civil society organizations under the Communities and Renewable Energy Project (CER) prepared recommendations to increase the effectiveness of the social impact evaluation following the auction. The recommendations draw from a policy diagnosis, consultations with relevant stakeholders and federal government institutions, and visits to five states. Key recommendations included the requirement to conduct site visits and a consultation with the community, implement an online social impact evaluation to increase speed and transparency, and couple an approved social impact evaluation with the issuance of a construction permit.² CER also proposed the creation of a Territorial Socio-Cultural Diagnosis as part of the National Strategy for Territorial Planning to ensure consideration of the different sociocultural factors of the territory for land-use planning.

1 La Planeación Social en la Transición Energética en México: elementos analíticos para la discusión pública (Social Planning in Mexico's Energy Transition: analytical elements for public discussion), CER, https://proyectocer.org/assets/img/La-Planeaci%C3%B3n-Social-en-la-Transici%C3%B3n-Energ%C3%A9tica-en-M%C3%A9xico_-elementos-anal%C3%ADticos-para-la-discusi%C3%B3n-p%C3%BAblica_Enero2020_VF2020.pdf

2 ICM Milestone Report, personal communication ICM, January 2021

The effectiveness of social impact regulation can be increased by monitoring bidder compliance before and after the auction. Authorities can collaborate with local communities to develop a process for monitoring and evaluating the social management of companies. Results from the evaluation can range from recommendations to warnings to sanctions that may result in the loss of a generation license.

An **auction working group** can enable consultation between government stakeholders, including the ministry of energy, the grid operator, and permitting authorities at the local and national levels, including those in charge of assessing and monitoring social impact evaluations. Consulting environmental and social governmental representatives through a dedicated workstream that considers the potential impacts of awarded projects in local communities, also by engaging with community representatives, would provide input in the selection measures within and outside of the auction. The evaluation of auction results, including feedback from local communities on the effectiveness of selected measures, allows policymakers to allow for changes in design as results are reviewed.

35 "Diagnóstico de percepciones de actores clave en el sector de las energías renovables sobre la efectividad de la Evaluación de Impacto Social en México (Diagnosis of perceptions of key actors in the renewable energy sector on the effectiveness of the Social Impact Assessment in Mexico)," CER, https://proyectocer.org/assets/img/Diagnostico-de-la-EvIS_abril-2020_vf.pdf

Auction working groups have been implemented in Mexico and, particularly in the early stages of the auction program, can align auction design with existing regulations, avoiding delays in the auction implementation process. Moreover, encouraging the participation of women in the auction working group not only increases gender equality in the decision-making process but also the likelihood that design elements promoting gender equality in the auction will be considered. Countries can build upon the experience gained with the implementation of gender mainstreaming policies by several regulators and utilities in the energy sector worldwide. In Tanzania, the energy regulator EWURA defined evaluation indicators for its 2017 gender policy such as the percentage of women participating in decision-making and in working groups and committees.³⁶

Governments introducing or implementing auctions can also define **measures to facilitate compliance with existing social impact regulation**. Colombia set out to develop a comprehensive and multi-sector initiative to address several issues in Guajira, a state with excellent renewable energy potential and the planned location for the awarded wind projects amounting to 1,077 MW.³⁷ Although the assessment of social impacts is one of the components developers must complete to obtain the environmental permit, the initiative will support the delivery of infrastructure and equipment to the area, facilitate the consultation process with the local communities, and develop a workforce plan for the construction and operation of renewable energy projects.³⁸ This will likely be a long-term project to develop workforce capacity that should start with a short- and medium-term effort focused on a mixed target of technical job opportunities and non-technical cross-cutting job opportunities in the community.

Chile and the state of Victoria in Australia³⁹ have developed best practice guides for participatory processes for project developers and community engagement and benefit-sharing, respectively. In the U.S., federal agencies are required to document the environmental and social impact of their infrastructure projects under the National Environmental Policy Act (NEPA), and the Bureau of Land Management and other agencies have developed best practices. In the province of British Columbia in Canada, the local government has a legal responsibility to consult and, where appropriate, accommodate⁴⁰ Indigenous peoples with interests in the project area before issuing permits for a renewable energy project.⁴¹ The First Nations consultation coordinator is assigned to a project's permitting process and is responsible for the development and implementation of a project-specific consultation program. Project proponents are expected to engage with Indigenous peoples as early as possible in the planning stages to build relationships and share information that may support the consultation process.

36 "Practical Guide to Women in Energy Regulation," USAID, <https://pubs.naruc.org/pub/CAA05EA6-CDCE-3F80-DBF6-56F3A3C31C8F>

37 "Accelerating Colombia's Renewable Energy Future through private sector investment," USAID, https://pdf.usaid.gov/pdf_docs/PA00XJHT.pdf

38 Personal communication, Tetra Tech SURE Colombia task lead, December 2020

39 "Community Engagement and Benefit Sharing in Renewable Energy Development: A Guide for Renewable Energy Developers," Analysis and Policy Observatory, <https://apo.org.au/sites/default/files/resource-files/2017-11/apo-nid309132.pdf>

40 Accommodation may include activities to avoid or mitigate adverse impacts or concerns respecting aboriginal interests brought forwards by a First Nation during engagement. Accommodation options could include changing the timing of a proposed activity, altering the footprint or location of a proposed activity, avoiding the aboriginal interest, or environmental monitoring. "Clean Energy Production in B.C. An Inter-Agency Guidebook for Project Development," Government of British Columbia, https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/natural-resource-major-projects/major-projects-office/guidebooks/clean-energy-projects/clean_energy_guidebook.pdf

41 "Clean Energy Production in B.C. An Inter-Agency Guidebook for Project Development," Government of British Columbia, https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/natural-resource-major-projects/major-projects-office/guidebooks/clean-energy-projects/clean_energy_guidebook.pdf

LOCAL VALUE AND BENEFIT-SHARING MEASURES

Benefit-sharing and/or local value creation measures in the communities where projects are located also can be encouraged outside of the auction program. These measures should respond to the needs and interests of local communities, including Indigenous people's vision for development and self-determined development.

BOX 5: EXAMPLES OF LOCAL VALUE CREATION AND BENEFIT-SHARING MEASURES OUTSIDE OF THE AUCTION

IMPLEMENTED AS A REGULATORY REQUIREMENT

Denmark's "option-to-purchase" requires wind energy project developers to offer ownership to local citizens, who have the right to purchase shares corresponding to at least 20 percent of the project's value. Adult citizens living in a radius of up to 4.5 kilometers (km) from the project can buy up to 50 shares in a new project. The size of one share corresponds to the price of 1,000 kWh. If any shares are left, project developers have to offer shares to persons living in the municipality where the project is established. Non-compliance can result in the loss of feed-in payments.¹

IMPLEMENTED AS VOLUNTARY MEASURES

A hydropower project in the province of British Columbia in **Canada** (Kokish Hydro) agreed with area tribes to give a 25 percent joint venture stake in the project company, a seat on the board, and \$40/MWh generated to the tribes. The developer concluded this agreement before bidding their project in a Canadian government tender and winning the rights to develop the project.²

In **Argentina**, a project developer agreed with the Mapuche Millaqueo community on the construction of two wind projects (12 MW and 75 MW). The agreement foresees a 50:50 split of project equity between both parties. The community contribution results from calculating the net present value of the annual land lease payments that would have been paid by the developer to the community over 20 years and the work the community provides in preparing project permits and searching for lenders and an off-taker.³

1 "Auctions and renewable energy communities," AURES II, http://aures2project.eu/wp-content/uploads/2020/02/AURES_II_D4_2_energy_communities.pdf

2 Interview with Laura Cornwell, November 2016

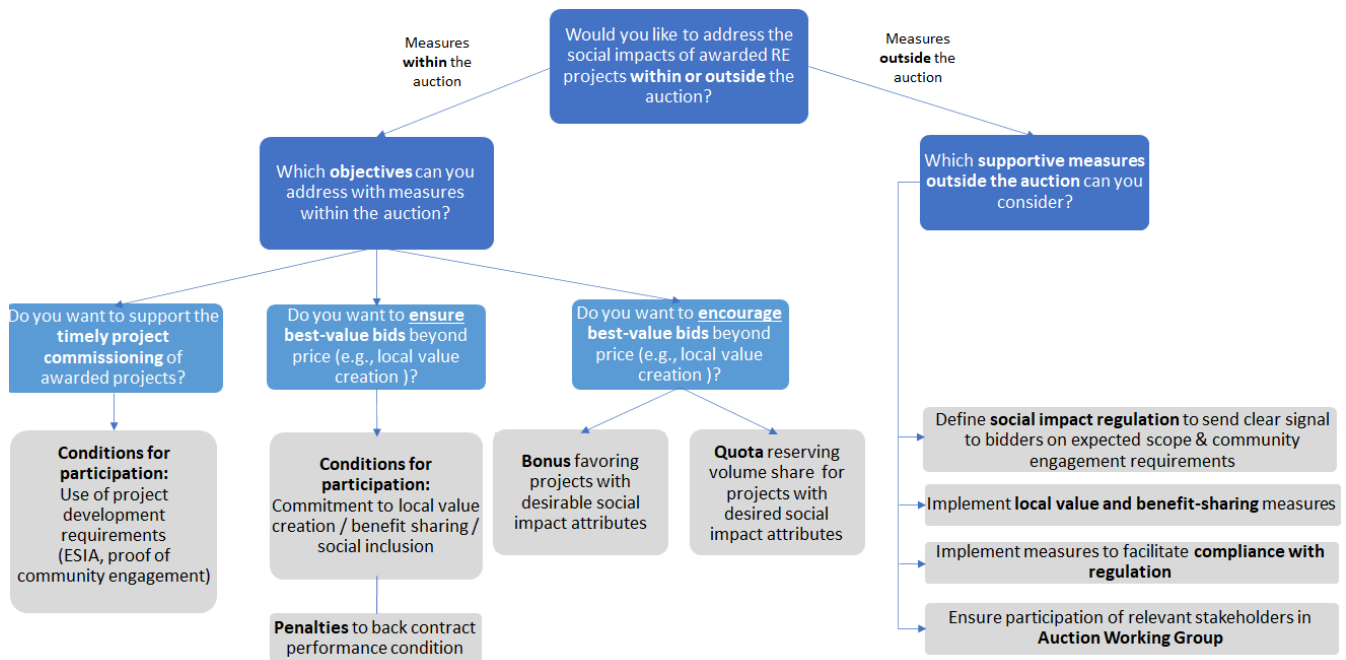
3 "Webinar: international experiences of participatory and socially inclusive Renewable Energy Projects," CER, <https://projectocer.org/en/webinar-entry/international-experiences-of-participatory-and-socially-inclusive-renewable-energy-projects>



5. Recommendations

Recommended design options and measures for countries intending to address the social impact of auctions are structured along a design options tree in Figure 5. The design options tree provides a recommendation based on the approach (measures within or outside of the auction) and policy objectives preferred by policymakers. These design options are not mutually exclusive: in fact, they are often used in conjunction with one another. Further considerations for the implementation of these recommendations are provided below in Figure 5, and additional resources are provided in the Additional Resources section.

FIGURE 5: Design options tree to address the social impact of renewable energy projects awarded in auctions



MEASURES WITHIN THE AUCTION:

To address specific objectives such as the timely project commissioning of projects or to ensure/encourage best-value bids beyond price, policymakers may rely on a range of design options inside the auction.

Conditions for participation. (e.g., commitment to local value creation) and the related *penalties* in case of non-compliance during the construction and operation of the project provide stronger safeguards against adverse social impacts compared to bonuses or quotas. However, defining these requirements may drive up the costs of participating in the auction. An option to balance the risk of negative social impacts without restricting the pool of participants too much in the auction is to require a preliminary social impact evaluation and evidence of community engagement as a condition for participation. To ensure that successful bidders finalize the social impact evaluation and conduct robust community engagement after the auction, penalties can be defined in the form of a financial guarantee or by tying the granting of licenses to the successful completion of these processes.

Bid award criteria. Simplicity is key to establishing bid award criteria. Social impacts can be addressed in both price-only and multi-criteria auctions. Price-only as an award criterion is more transparent, while ensuring that awarded bids meet the requirements defined. Price-only is the best practice and allows the consideration of social impacts through the definition of participation requirements, albeit with less flexibility compared to multi-criteria auctions. If multi-criteria auctions are implemented, criteria should be specific, quantitative, and transparent to bidders. Policymakers are advised to monitor the performance of the projects during project execution to mitigate the risk of overpromising and under-delivering by bidders.

Local value creation. Auction design can target the procurement of projects that create local value, but it is important to ensure the design measures chosen fit the local market. A key step in this assessment is to map a country's industrial capacity and then decide whether to target the promotion of local industry (e.g., manufacturing of PV modules) or the local labor force for operations and maintenance services. Once experiences are gained, the ambition for local value creation can be increased. IRENA⁴² and REN21⁴³ offer further resources on how local value creation and benefit-sharing measures can support a just energy transition.

MEASURES OUTSIDE THE AUCTION:

Supportive measures outside the auction design may also be implemented. Note that measures within and outside the auction are not mutually exclusive. By contrast, supportive measures outside the auction can complement specific auction design options and thus contribute to the achievement of social impact objectives and the local acceptance of awarded projects. Further resources on how to address the social impacts of renewable energy projects are included in the Additional Resources section.

42 "Renewable energy auctions: Status and trends beyond price," IRENA, 2019, https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Dec/IRENA_RE-Auctions_Status-and-trends_2019.pdf

43 "Renewable Energy Tenders and Community [Em]power[ment]: Latin America and the Caribbean," REN 21, 2019, <https://www.ren21.net/wp-content/uploads/2019/06/LAC-Report.pdf>

6. Additional Resources

USAID's Resource Guide for Environmental and Social Impact Assessment:

https://pdf.usaid.gov/pdf_docs/PA00TC8T.pdf

Guide to Community Engagement for Power Projects in Kenya," USAID,

https://www.usaid.gov/sites/default/files/documents/1860/FINAL_Guide_to_Community_Engagement_-_Jan_17_2018_508-compressed.pdf

USAID's Policy on Promoting the Rights of Indigenous Peoples (PRO-IP), USAID;

<https://www.usaid.gov/indigenous-peoples/usaid-policy-on-indigenous-peoples>

CER Project – Communities and Renewable Energy, CER,

<https://proyectocer.org/en>

Institute for the Equality of Men and Women. Equal opportunities for men and women in public procurement contracts:

<https://igvm-iefh.belgium.be/sites/default/files/downloads/20%20-%20Public%20procurement%20contracts.pdf>

United Nations Women. The power of procurement: How to source from women-owned businesses:

<https://www.unwomen.org/en/about-us/procurement/gender-responsive-procurement>

Global Atlas of Environmental Justice:

<https://ejatlas.org/>

USAID's Operational Guidelines for Responsible Land-Based Investment:

<https://www.land-links.org/tool-resource/operational-guidelines-for-responsible-land-based-investment/>

Guidelines on Compulsory Displacement and Resettlement in USAID Programming:

<https://www.land-links.org/tool-resource/guidelines-on-compulsory-displacement-and-resettlement-in-usaid-programming/>

USAID's Investor Survey on Land Rights:

https://www.land-links.org/wp-content/uploads/2018/05/Investor-Survey-on-Land-Rights_Report-2018.pdf





AUCTION DESIGN AND THE SOCIAL IMPACT OF RENEWABLE ENERGY PROJECTS

SCALING UP RENEWABLE ENERGY (SURE)



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