

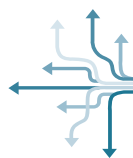
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# EXECUTIVE SUMMARY

November 2020

## Co-Benefits: How the Energy Transition contributes to Sustainable Development in Mexico





## Imprint

This report has been elaborated in the context of the “Social and Economic Co-Benefits of Energy Efficiency and Renewable Energies in Mexico” (Co-Benefits Mexico) project, implemented through the project Enhancing the Coherence of Climate and Energy Policies in Mexico (CONECC) of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, in collaboration with the COBENEFITS project lead by the Institute for Advanced Sustainability Studies, Potsdam (IASS). Co-benefits Mexico is carried out in coordination with the Ministry of Environment and Natural Resources (SEMARNAT).

CONECC and COBENEFITS are part of the International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports these initiatives on the basis of a decision adopted by the German Bundestag.

The COBENEFITS project is coordinated by the Institute for Advanced Sustainability Studies (IASS, lead) in partnership with the Renewables Academy (RENAC), the Independent Institute for Environmental Issues (UfU), and the International Energy Transition GmbH (IET).



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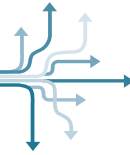
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# Toward a fair and sustainable energy transition in Mexico

## Foreword in light of recent events

Mexico along with many economies around the world has been severely affected by the spread and impacts of the global COVID-19 pandemic. The broader consequences have been devastating for millions of families, workers, and businesses, as well as for local economies and national health systems. Similarly to many countries worldwide, substantial political efforts will be needed to rebuild national and local economies and job markets.

Recovering from the economic shocks of the COVID-19 pandemic, and avoiding severe future shocks triggered through the climate crisis, do not represent conflicting interests but rather a mutually reinforcing coping strategy. This report suggests that the new energy world of renewables and the decarbonisation of the Mexican energy sector have strong roles to play in reviving the economy by boosting employment, enhancing energy efficiency and by creating savings and income for communities.

In a fruitful partnership, the Ministry of Environment and Natural Resources (SEMARNAT) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in collaboration with the Institute for Advanced Sustainability Studies of Potsdam (IASS) have prepared this in-depth assessment, which examines the important social and economic co-benefits of renewable energy and energy efficiency in Mexico's energy transition, as well as suitable policy options to deliver these benefits for the people of Mexico.

We particularly highlight and acknowledge the strong dedication and active representation of the federal states of Baja California Sur, Mexico City, Oaxaca, and Yucatán, which provided important guidance on framing co-benefits assessment topics and ensuring the political relevance of the social and economic opportunities addressed.

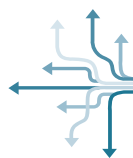
We are also indebted to our highly valued research and knowledge partners, Ithaca Environmental and the Iniciativa Climática de México, for their unwavering commitment and dedicated work on the technical implementation of this study. The Co-benefits Mexico study at hand has been facilitated by the project Enhancing the Coherence of Climate and Energy Policies in Mexico (CONECC) of the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) through financial support from the International Climate Initiative of Germany (IKI).

Mexico, among 189 parties to date, has ratified the Paris Agreement to combat climate change and provide current and future generations with opportunities to flourish. With this study, we seek to contribute to the success of this international endeavor by offering a scientific basis for harnessing the social and economic co-benefits of building a low-carbon, renewable energy system while facilitating a just energy transition, thereby making climate action a success for the planet and the people of Mexico.

We wish the reader inspiration for the important debate on a just and sustainable energy future for Mexico!

**Jonas Russbild**  
Project Director CONECC  
GIZ

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COBENEFITS Project Director  
IASS Potsdam



## Exploring co-benefits: A fair energy transition for sustainable development in Mexico

This report explores how the co-benefits of renewable energy and energy efficiency saving measures can play an active role in connecting the Mexican energy transition with key processes and commitments for development that have been determined by the country itself. These include the National Development Plan (NDP) for 2019-2024 as well as climate goals or Nationally Determined Contributions (NDC), to which Mexico is committed under the Paris Agreement. This study, published in conjunction with the project Enhancing the Coherence of Climate and Energy Policies in Mexico (CONECC), offers quantitative evidence of the co-benefits of two routes (scenarios) for energy transition as related to the Energy Transition Law (LTE). These vary in scope however, revealing how the co-benefits of renewable energy and energy efficiency can help to play an active role in achieving national development goals.

**The term 'co-benefits' refers to the simultaneous fulfilment both of various interests or objectives resulting from a public policy intervention, and investment from the private sector, or a combination of both (Helgenberger, S., Jänicke, M. & Gürtler, K., 2019).**

In terms of climate action, the co-benefits of mitigating against carbon emissions emphasize positive results in other policy areas, such as air quality and health, as well as economic prosperity and efficient use of resources. Beyond its relevance for the government's promise of greater equality and social justice for Mexican citizens, co-benefits aims to act as a facilitator in order to overcome political obstacles and create new coalitions in terms of public policy (IASS, 2017)

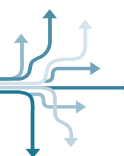
### THE SOCIAL AND ECONOMIC CO-BENEFITS OF THE ENERGY TRANSITION IN MEXICO: THREE PRIORITY AREAS

The evaluation of co-benefits centred on three priority areas. These were identified through consultations with associated governments and key stakeholders, in consideration of social and economic opportunities related to the energy transition in Mexico, and with a view to strengthening renewable energies and energy efficiency measures.

- **Cost savings and income generation in public buildings with renewable energy and energy efficiency measures.**
- **Cost savings and income generation for local communities through the use of renewable energy.**
- **Employment opportunities and capacity-building through the use of renewable energy.**

This co-benefits assessment report connects analysis at a national level with regional evidence from **case studies in the states of Baja California Sur, Mexico City, Oaxaca and Yucatan.**

The report proposes public policy options in the three priority areas to enable the socio-economic co-benefits identified. These are based on the results of the study itself, as well as on qualitative analyses of conversations with representatives of national and subnational governmental organisations and held during a series of regional and national workshops to enable public policy. The policy options identified are classified by national, sub-national, and national/sub-national levels.



## ENERGY TRANSITION PATHWAYS FOR MEXICO

With a view to situating itself within the existing political landscape, the assessment focuses on scenarios of relevance to public policy. As such, it aims to benefit from a comparison of the socio-economic performance of different routes for energy transition. Two policy routes, serving as reference points, have been specified for the evaluation of co-benefits for the period 2020–2050:

- 1 **Current policy pathway towards achieving the goals of the Energy Transition Law (MLTE)** in Mexico, based on the 2019 Development Programme for the National Electricity System (PRODESEN).
- 2 **Transition policy pathway to zero carbon emissions (Zero Carbon Transition or ZCT)**, based on PRODESEN but more ambitiously designed in terms of decarbonising the Mexican power sector and implementing renewable energy.

## GENERATING SAVINGS AND INCOME IN PUBLIC BUILDINGS WITH RENEWABLE ENERGY AND ENERGY EFFICIENCY MEASURES

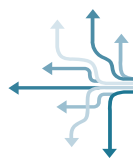
### PUBLIC POLICY OPTIONS: NATIONAL LEVEL

#### PUBLIC POLICY OPTION #1: PROMOTE THE ROLE OF PUBLIC BUILDINGS AS A MODEL FOR ENERGY SAVING BY INCLUDING THEM IN MEXICO'S NDC

**Given their substantial potential for the mitigation of greenhouse gases (GHG), public buildings can play a significant role in the national mitigation strategy. Mitigation objectives based on energy efficiency measures in public buildings could be further detailed in the review of Mexico's NDC. Public buildings could become models for energy and cost savings, motivating further initiatives among private owners of buildings.**

**A significant reduction in the carbon footprint of public buildings is economically viable.** The total potential for the mitigation of GHG in hospitals and public schools, based on the adaptation of energy efficiency measures combined with individual generation of solar energy, amounts to more than 1.8 million tCO<sub>2</sub>e (metric tonnes of Carbon Dioxide Equivalent) per year.

**By combining investment in photovoltaic (PV) self-generation and mid-level energy efficiency measures public schools in Mexico could make a significant step toward decarbonization** and unleash a GHG mitigation potential of more than 500,000 tCO<sub>2</sub>e per year with an estimated 5 year period for return on investment.



## PUBLIC POLICY OPTION #2: INCENTIVE SCHEME FOR SCHOOLS AND PUBLIC HOSPITALS TO BENEFIT FROM SAVINGS

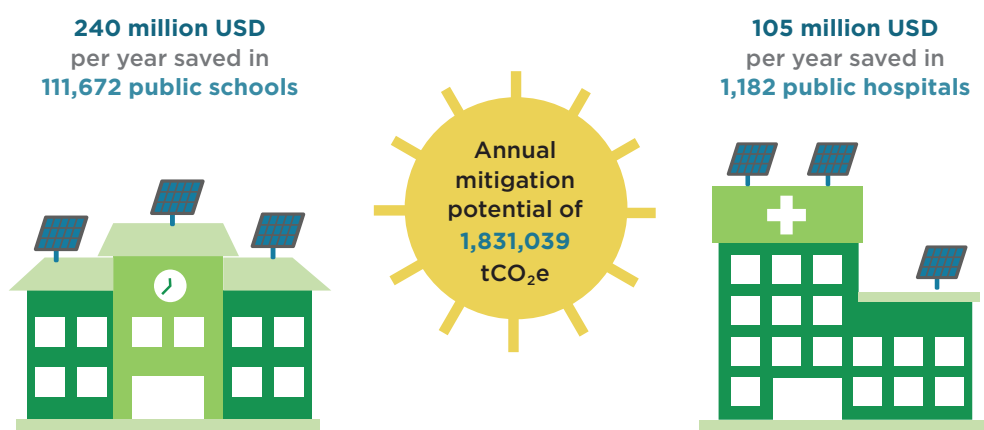
**Schools and hospitals can achieve considerable energy savings and contribute to GHG reductions at almost no cost, they do not directly benefit from the savings in energy costs given that they are not responsible for the payment of their own electricity costs.**

This results in little or no incentive on their part to implement energy efficiency measures. By exploring new payment schemes, the Ministry of Finance, in coordination with state governments, can provide additional incentives to spark the interest of school and hospital administrations in energy-saving measures.

**Public hospitals in Mexico can save more than 900 million pesos (US \$47 million<sup>1</sup>) a year by implementing mid-level energy efficiency measures such as motion detectors for lighting, and increased use of sunscreens for buildings in order to reduce the demand for cooling.** These measures would require a total investment of around 1.8 billion pesos (94 million USD) with a period of approximately 2 years for return on investment. These simple measures could bring about a 5% reduction in electricity consumption in public hospitals, representing an annual mitigation potential of nearly 265,000 tCO<sub>2</sub>e.

**Public schools in Mexico could save more than 2 billion pesos (105 million USD) a year by implementing mid-level energy efficiency measures such as motion detectors for lighting, and high-efficiency air conditioning systems.** With a total investment of about 2.6 billion pesos (136 million USD), the period for return on investment is just over a year. Through these measures, electricity consumption in public schools could be reduced by about 25% with a GHG mitigation potential of more than 470,000 tCO<sub>2</sub>e per year.

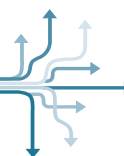
### MAJOR SAVINGS IN ENERGY COSTS AND POTENTIAL GHG MITIGATION IN PUBLIC SCHOOLS AND HOSPITALS



Mexico could save **346 million USD** each year by using renewable energy and energy efficiency measures in **schools and public hospitals**.

The diagram shows the total energy cost savings and total mitigation potential of public schools and hospitals combined (including low, mid, and high-level measures). © GIZ Mexico

<sup>1</sup> All exchange rates are for November 2019



### **PUBLIC POLICY OPTION #3: BUDGET-NEUTRAL PROGRAMS<sup>2</sup> TO COVER INITIAL INVESTMENTS IN ENERGY SAVINGS**

**Despite the attractive return on investment of energy efficiency measures, institutional budgets may not cover initial investment costs, which could be a significant barrier to implementation.**

Climate finance programs and public/private partnerships can facilitate investments by schools and hospitals in energy-saving measures and allow them to benefit from cost savings. Combining solar energy and energy saving measures to enhance GHG mitigation can serve as additional argumentation for implementing initial investment programs.

**Public hospitals in Mexico can reduce their energy-related expenses by 2.2 billion pesos (115 million USD)** through the implementation of combined energy efficiency measures and self-generation of solar PV energy. These measures would mitigate nearly 630,000 tCO<sub>2</sub>e annually with a 2.4 year period for return on investment.

**Public schools in Mexico can reduce their energy consumption** by more than 7% simply by introducing low to zero cost energy efficiency measures, such as disabling standby mode on electronic devices and enabling power-saving mode on computers. In addition to the annual savings of about 822 million pesos (43 million USD), these measures can mitigate more than 193,000 tCO<sub>2</sub>e per year.

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## **PUBLIC POLICY OPTIONS: SUB-NATIONAL LEVEL**

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### **PUBLIC POLICY OPTION #4: COMBINED ENERGY SAVING AND EDUCATION PROGRAMS**

**Involving students in the planning and implementation of energy-saving programs not only contributes to an applied curriculum, but also serves to diffuse knowledge within the students' social and family environments.**

To this end, a portion of the savings can be allocated to school community budgets to co-create innovative projects, thus adding another incentive, particularly for energy efficiency improvements that can be easily achieved.

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## **PUBLIC POLICY OPTIONS: NATIONAL/SUB-NATIONAL LEVEL**

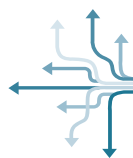
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### **PUBLIC POLICY OPTION #5: INCORPORATE COST-SAVING POTENTIAL INTO EXISTING ENERGY-USE MONITORING SCHEMES**

**Strengthen existing efforts to monitor energy demand and use in public buildings. Data collection can be complemented by monitoring and disseminating the potential for collateral savings in the public sector.**

Additional surveys and detailed audits according to the type of building and regional climate will further strengthen the information base and help specify cost-saving opportunities.

<sup>2</sup>Normally governmental, budget neutral programs employ fiscal strategies that are not financed by loans. They thus avoid deficits and have a neutral effect on the budget.



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## COMMUNITY ENERGY: GENERATING SAVINGS AND INCOME

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### PUBLIC POLICY OPTIONS: NATIONAL LEVEL

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#### PUBLIC POLICY OPTION #1: REINVEST ELECTRICITY SUBSIDIES TO DEVELOP A COMMUNITY-ORIENTED RENEWABLE ENERGY INDUSTRY

**The Federal Electricity Commission (CFE), together with the Ministry of Finance, can programmatically reduce subsidies in order to encourage investment in renewable energy and energy efficiency measures.** This reinvestment programme could be designed to be socially just for the affected groups and can gradually free up federal budgets to address other priority investments in the social and economic NDP programme.

**CFE subsidies constitute a national opportunity cost of 45.5 billion pesos (2.3 billion USD).** The electricity rates for medium sized companies and the industrial sector are the highest at approximately 25.5 billion pesos. To put these potential savings in context, the federal budget for 'Youth Building the Future', the government's second largest priority program, was \$40 billion pesos in 2019 (DOF, 2018).

#### PUBLIC POLICY OPTION #2: ENCOURAGE LOCAL ECONOMIC PARTICIPATION IN RENEWABLE ENERGY PROJECTS THROUGH TENDERING PROCEDURES

**Tendering procedures can be revised to include regulations for project developers, requiring developers and those carrying out the work to ensure the financial participation of large-scale renewable energy projects.**

This can be achieved by taxing those projects in benefit of community funding. Local energy and revenue generating institutions can also be invited to implement a framework that promotes local economic benefits and local community support.

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### PUBLIC POLICY OPTIONS: SUB-NATIONAL LEVEL

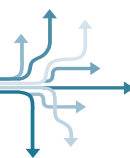
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#### PUBLIC POLICY OPTION #3: COMMUNICATION PROGRAMME FOR LOCAL ECONOMIC OPPORTUNITIES

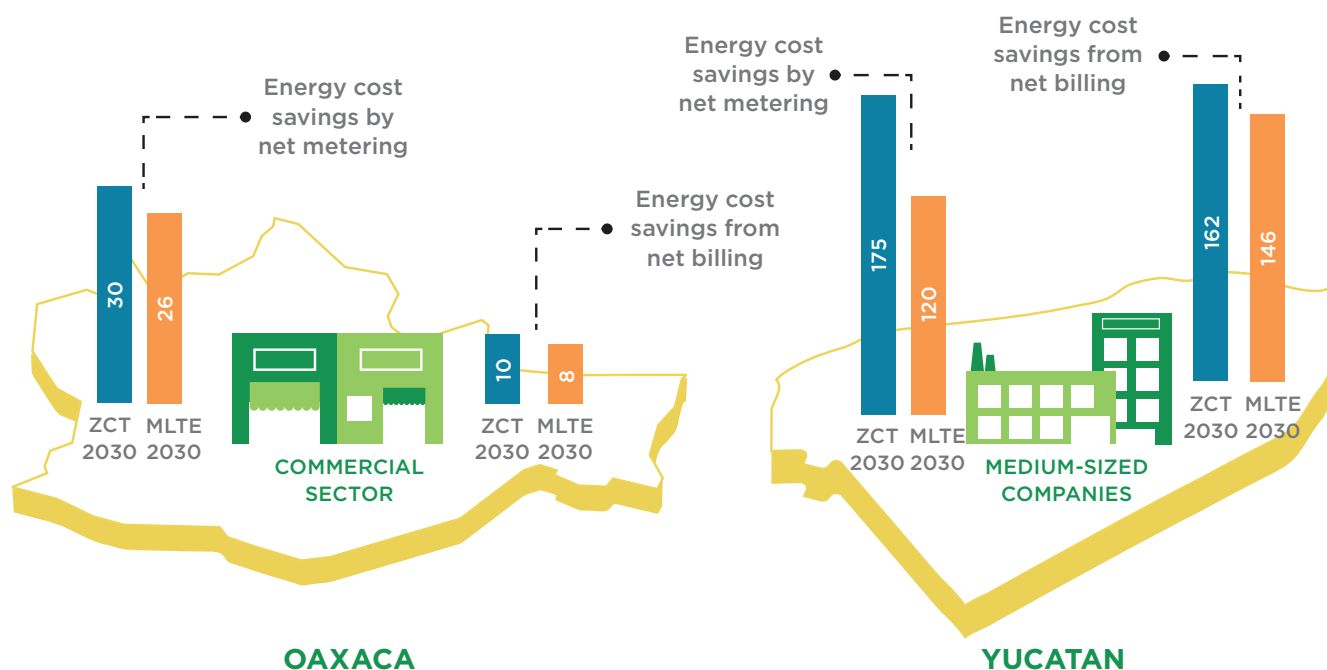
**States can engage in an assertive communication strategy and research-based campaign to target end-users identified at a regional and municipal level. Such campaigns would communicate the potential savings, income generation, and multiple co-benefits of renewable energy and energy efficiency measures.**

Ongoing communication with the Agrarian Ombudsperson (Procuraduría Agraria), who serves as the legal representative for public (ejidos)<sup>3</sup> and communal lands, would help improve relations with local communities and include them in project implementation and economic participation.





## POTENTIAL COST SAVINGS (IN MILLIONS OF USD) PER DISTRIBUTED PHOTOVOLTAIC GENERATION (GDFV) IN OAXACA AND YUCATAN



MLTE: Current policy pathway towards achieving the goals of the Energy Transition Law (MLTE) in Mexico

ZCT: Transition policy pathway to zero carbon emissions (Zero Carbon Transition or ZCT)

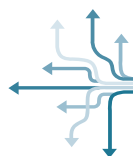
The diagram shows a selection for the 2030 estimated savings in electricity costs (in million USD per sector) under the net metering and billing scheme (2020-2049) in the energy transition routes MLTE and ZCT in the commercial sector for Oaxaca and for medium-sized companies in the case of Yucatan. © GIZ Mexico

### PUBLIC POLICY OPTION #4: STATE PROGRAMMES TO PROMOTE ECONOMIC PARTICIPATION AT THE LOCAL LEVEL AND INCOME GENERATION IN RENEWABLE ENERGY PROJECTS

**State governments can also encourage local shareholding by introducing state programmes to cover initial investments for municipalities, small businesses and households and thus co-invest in renewable energy projects.**

These would eventually benefit local stakeholders through a specific share of the profits from these projects.

<sup>3</sup> Land subject to a special social property regime; constitutionally this personality is recognised and its assets are specially protected (Cámara de Diputados, 2014).



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## PUBLIC POLICY OPTIONS: NATIONAL/SUB-NATIONAL LEVEL

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### PUBLIC POLICY OPTION #5: TECHNICAL GUIDELINES TO FACILITATE DISTRIBUTED GENERATION BY SOLAR PV

**The Energy Regulatory Commission (CRE) can incentivize small projects by increasing the distributed generation (DG) ceiling from 499 kW to at least 1 MW in circuits or areas that allow it.**

Guidelines that facilitate collective DG, considering a collective scheme for net metering at different points of interconnection (POIs) within the same price area, or at least within the same distribution circuit, may create additional support. This option could be accompanied by a capacity building programme to increase the participation of small projects and encourage income generation at sub-national and regional levels.

**By 2030, the accumulated energy cost savings under the net metering scheme in all sectors of Oaxaca will have exceeded one billion pesos (52 million USD)** with the commercial sector as the main beneficiary (over 50%) of these savings, regardless of the energy transition route.

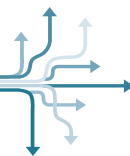
**From 2030, the ZCT route will lead to significantly higher economic benefits under the net metering scheme in Oaxaca as compared with MLTE.** By 2040, the accumulated cost savings for all sectors analysed in Oaxaca with the ZCT route would be 63% higher than those achieved through the current policy route, exceeding 7 billion pesos (366 million USD). This figure is estimated to more than double by 2050, to 17.7 billion pesos (925 million USD).

**By 2030, national, commercial and medium-sized companies, as well as large industrial users in Oaxaca, can expect economic benefits of 640 million pesos (33.5 million USD) from the net billing scheme under current public policy.** These benefits can be increased by more than 20% to 780 million pesos (40 million USD) under an ambitious public policy environment of decarbonisation (ZCT).

**By 2030, under current public policy, national, commercial and medium-sized companies, as well as large industrial users in Yucatan, will benefit from savings of 4.5 billion pesos (235 million USD) under the net metering scheme.** These benefits can be increased by 50% to 6.7 billion pesos (350 million USD) under an ambitious public policy of decarbonisation (ZCT), with commercial and medium-sized companies being the main beneficiaries, achieving more than 90% of the accumulated cost savings.

**By 2030, under current public policy, national, commercial and medium-sized companies, as well as large industrial users in the Yucatan, expect to see cumulative economic benefits of 4 billion pesos (209 million USD) as a result of the net billing scheme.** These benefits can be increased by more than 40% to 5.8 billion pesos (303 million USD) with the ZCT route.

**By 2030, it is estimated that the municipalities analysed in Yucatan will accumulate 5 billion pesos (261 million USD) of distributed PV generation through the net metering scheme** under ZCT, exceeding the savings of the MLTE by almost 50%. By 2040, the total savings in all municipalities analysed under the ZCT route are estimated at 35 billion pesos (1.8 billion USD), thus doubling the expected economic benefits of the MLTE.



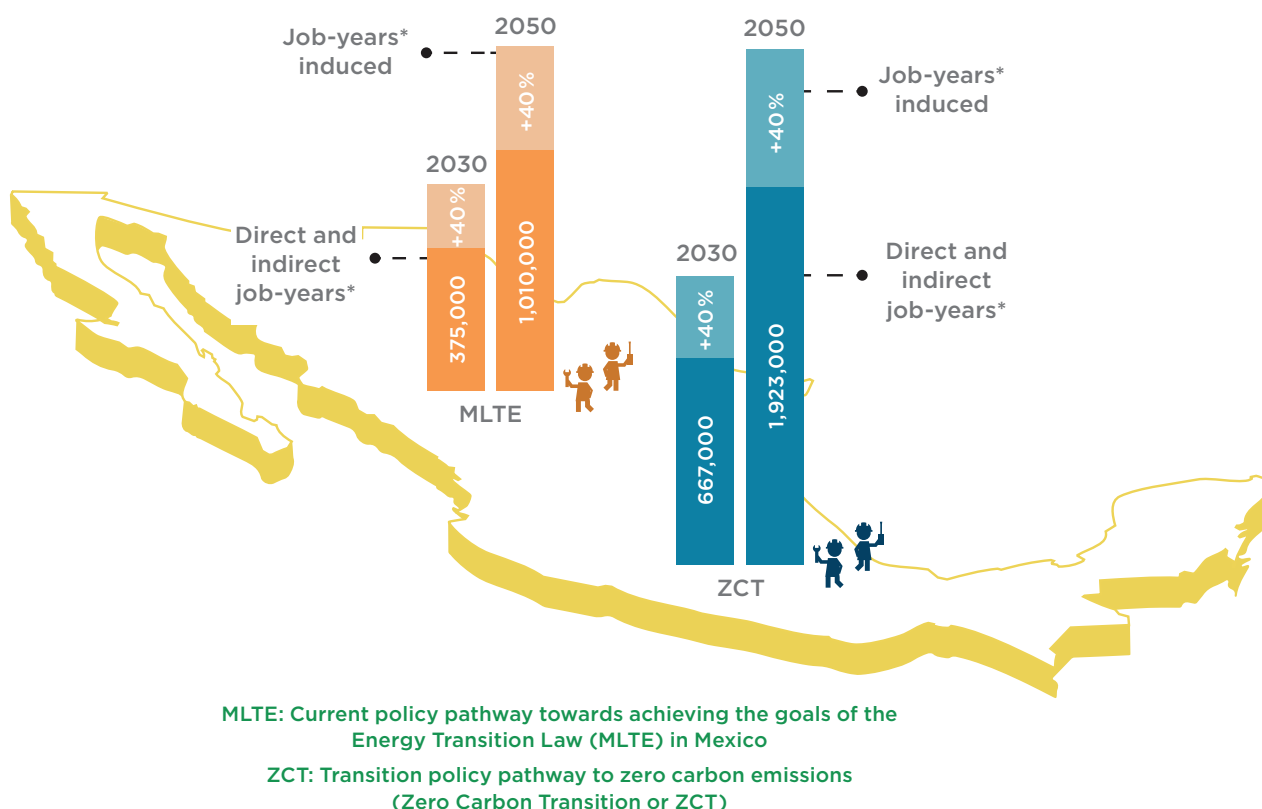
## JOB CREATION IN THE ENERGY TRANSITION

### PUBLIC POLICY OPTIONS: NATIONAL LEVEL

#### PUBLIC POLICY OPTION #1: CREATION OF JOBS THROUGH THE FULFILMENT OF CLIMATE AND ENERGY OBJECTIVES

By fully implementing the objectives established in the LTE, Mexico<sup>4</sup> will create more than 375,000 direct and indirect job-years<sup>5</sup> by 2030 and more than 1 million direct and indirect job-years by 2050.

#### EMPLOYMENT OPPORTUNITIES THROUGH RENEWABLE ENERGIES IN YEARS

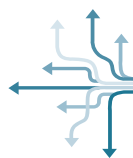


The graph shows how many job-years can be generated through the use of renewable energies in Mexico by 2030 and 2050 through the two energy transition routes MLTE and ZCT.

\*A job-year is defined as full time employment for one person for one year. For more information on types of employment (direct, indirect and induced). © GIZ Mexico

<sup>4</sup> According to the LTE and updated with the Transition Strategy to Promote the Use of Cleaner Technologies and Fuels, Mexico should achieve 35% and 50% of electricity generation from clean energy sources (renewable energies including hydro, but also natural gas) by 2024 and 2050 respectively.

<sup>5</sup> A "job-year" is defined as full time employment for one person for one year.



## **PUBLIC POLICY OPTION #2: CREATION OF JOBS THROUGH RENEWABLE ENERGIES**

**In the construction phase, all renewable energy technologies outperform fossil energy generation technologies, particularly wind power, with over 21 job-years per MW installed and photovoltaic distributed generation (PVDG) with around 9.5 job-years per MW installed, compared to 5.5 job-years for coal-fired and 1 job-year for gas-fired power plants (combined cycle gas turbine, CCGT).**

Solar PV and GDFV perform particularly well in the operation and maintenance (O&M) phase but at a lower overall level, with around 0.4 job-years per MW installed, compared to 0.14 job-years for coal-fired power, 0.08 for wind power and 0.05 job-years for gas-generated power.

## **PUBLIC POLICY OPTION #3: YOUTH BUILDING THE FUTURE PROGRAM ON RENEWABLE ENERGY**

**Encourage companies in the renewable energy industry to join forces with successful government welfare programs in order to attract young talent to the emerging industry and send a persuasive message about the growing relevance of this sector.**

Furthermore, consideration can be given to public/private participation mechanisms, under which renewable energy projects can directly contribute to the above programs.

## **PUBLIC POLICY OPTION #4: EVALUATE LOCAL CONTENT REQUIREMENTS**

**Tendering procedures can be revised to include regulations on the use of local technological components, thus strengthening the development of national industry and jobs (direct and indirect) throughout the value chain of renewable energies.**

Additional employment-related regulations in the local community can promote positive impact on local employment and contribute to the social and economic development of the community. However, the design phase of these measures should research and consider the positive and negative effects related to a policy with local content.

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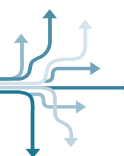
## **PUBLIC POLICY OPTIONS: SUB-NATIONAL LEVEL**

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### **PUBLIC POLICY OPTION #5: Having the right job in the right place**

**The assessment of the skills gap shows that Mexico can meet most of the demand for skills in the renewable energy sector at the national level; however, the skilled workforce must be located such that the employment needs generated by construction, operation and maintenance projects can be met.**

States with significant potential for PV and wind energy deployment should engage more with both the private sector as well as institutions for training and education in order to identify the skills and knowledge required by the renewable energy industry along the supply chain. Consequently, universities should review their programmes and prepare students to join the industry.



**The Mexican education and university system can meet the growing demand for labour in the renewable energy sector.** While a certain degree of labour mobility throughout the country can be assumed, subsequent analyses (e.g., analysis at the level of educational and training) can provide additional evidence on the effects of geo-graphic distribution in order to specialize skill development to regional demands.

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## **PUBLIC POLICY OPTIONS: NATIONAL/SUB-NATIONAL LEVEL**

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### **PUBLIC POLICY OPTION #6: PARTNERSHIPS FOR ENERGY TRANSITION**

**Progress in renewable energy and sustainability does not issue from established actors alone. Generating local innovations through competitions between students and young developers and creating renewable energy laboratories for these target groups, private companies, start-ups and universities, can facilitate the recognition of renewable energies as a future-oriented industry in Mexico.**

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## **CO-BENEFITS AS FACILITATORS OF SUSTAINABLE DEVELOPMENT IN MEXICO: KEY OPPORTUNITIES FOR PUBLIC POLICY**

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**The Mexican government has reiterated its commitment to transforming the country and providing greater equality and social justice for Mexican citizens.** By discussing and promoting the incorporation of renewable energies in the energy generation matrix and energy efficiency measures as transformational actions, the country will significantly reduce the climate footprint<sup>6</sup> of the energy sector and, at the same time, open up key social and economic opportunities.

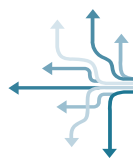
In line with the **National Development Plan 2019–2024 (NDP)**, federal state governments and community leaders can spearhead community-centred energy planning to enable local benefits, creating more equitable and democratic negotiations with communities and encouraging citizen ownership of these projects. Recent international experiences, such as the Just Transition Dialogues on South Africa's energy future, can be used as a stimulus to shape Mexico's energy transition.

### **PUBLIC POLICY OPTION #1: JUST ENERGY TRANSITION DIALOGUES**

**Launch a series of dialogues (at the federal and regional levels) with local community and business representatives, local policy makers and those carrying out the work to address local opportunities and concerns.**

Jointly identifying options to maximize the social benefits of renewable energy and energy efficiency projects can be a major step in aligning Mexico's energy transition with the NDP and the government's mission to achieve greater well-being for all.

<sup>6</sup>The term is derived from Carbon Footprint, defined as the quantity of greenhouse gases emitted by a country in a given period of time (EPA, 2017).



Global social and economic opportunities for well-being and prosperity have, along with **global climate action**, become the main drivers for continued and increased investment in renewable energy and energy efficiency. By accelerating Mexico's energy transition and making the NDC a declaration of opportunity for current and future generations in Mexico, the government can fulfil its social promises and strengthen the country's leadership position in climate action.

### PUBLIC POLICY OPTION #2: MAKING CO-BENEFITS PART OF MEXICO'S NDC

Building on the promise of enabling the co-benefits of employment and welfare for the Mexican population through the NDC and its review process, the government can take the opportunity to include among its contributions a "co-benefits" section that specifies and communicates the social and economic co-benefits it seeks to promote in the country, describing how **climate action can play an active role in the government's social policy**.

The **2030 Agenda for Sustainable Development** and the growing body of research on its implementation provide an analytical framework for identifying relevant co-benefits of sectoral policies and designing policy schemes to maximise cross-sectoral co-benefits, for example between climate commitments, energy policies and the NDP.

On the other hand, regional exchanges (such as the Mexico 2019 Co-benefits Workshops held in Baja California Sur, Oaxaca, Mexico City and Yucatan) can play an important role in visualizing and achieving Sustainable Development Goals (SDGs) within local communities.

### PUBLIC POLICY OPTION #3: INTRODUCE A CO-BENEFIT APPROACH TO INTER-MINISTERIAL BODIES

Building on the knowledge and momentum of the proposed regional and national energy transition dialogues, inter-ministerial working groups (such as the Inter-ministerial Commission on Climate Change (IMCC), or the Advisory Council on Energy Transition, CCTE in Spanish) could be mandated to **incorporate considerations of social and economic performance for local communities and businesses** into their work. **With its 2030 Agenda Directorate and its perspective on Sustainable Development Goals, the Office of the Presidency could play a key role in facilitating the design of cross-sectoral public policy interventions.**

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## CONECC

### Enhancing the coherence of climate and energy policies in Mexico

The project aims to build capacities of the main stakeholders of climate and energy policy in Mexico in order to initiate or implement measures which improve the collaboration between the energy and climate sector. By doing so, Mexico will be able to strengthen the contribution from its energy sector towards the country's climate objectives.

The project is implemented in the context of the transformation of Mexico's energy system with the objective of building bridges between the energy and climate change sector and harmonizing climate and energy policies. To this end, the project advises the Ministry of Environment and Natural Resources (SEMARNAT) on technical and processes aspects of the climate-energy interface.

## COBENEFITS

### Connecting the social and economic opportunities of renewable energies to climate change mitigation strategies

COBENEFITS cooperates with national authorities and knowledge partners in countries across the globe such as Germany, India, Kenya, Mexico, South Africa, Turkey, and Vietnam to help them quantifying the co-benefits of early climate action in their countries. The project supports efforts to develop enhanced NDCs with the ambition to deliver on the Paris Agreement and the 2030 Agenda on Sustainable Development (SDGs). COBENEFITS facilitates international mutual learning and capacity building among policymakers, knowledge partners, and multipliers through a range of connected measures: country-specific co-benefits assessments, online and face-to-face trainings, and policy dialogue sessions on enabling political environments and overcoming barriers to unlock the co-benefits.

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