



Research article



# Management of public and fiscal policies for the energy transition and sustainable development in Mexico

## *Gestión de políticas públicas y fiscales para la transición energética y el desarrollo sustentable en México*

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**Abstract.** - *One of the biggest problems facing the population worldwide is global warming, mainly derived from the anthropogenic footprint. The excessive increase in actions that impact the environment such as public transportation, the use of fossil fuels, industry, etc., have unbalanced ecosystems. The measures and actions to mitigate the environmental impact have not been enough, this has disturbed the United Nations Organization (UN), which has taken a series of international measures such as the proposal of 17 objectives that help to safeguard different large social. Among the goals for 2030 is what is relevant to "clean energy". To align with these strategies, Mexico must take concrete and efficient actions; these actions must be established through the strict elaboration of public policies, which manage to integrate different scientific and technological areas, with timely participation of the different actors involved. The proposal of this document is the integration of public policies together with fiscal and energy policies that contribute to common objectives, through different actions such as energy efficiencies and increasing the participation of renewable energies in the country's energy matrix. Mexico has currently stopped some strategies planned in previous government periods, which have been stopping an energy transition that manages to establish an optimal use of infrastructure and develop a plan that allows the diversification of the energy matrix with the incorporation of renewable energy sources to reduce the use of fossil fuels, which have a share of more than 70% causing various damages to the environment and health. The execution of the proposed strategy required the integration and commitment of the different actors involved, due to the complex nature of the public policy formulation process, the authors propose working with a quality regulatory framework and monitoring the different governmental changes in the country.*

**Keywords:** Energy transition; Sustainable development; Energy; Public politics; Tax policies; Renewable energy; Energy indicators; Energy matrix

**Resumen.** - *Una de las mayores problemáticas que enfrenta la población a nivel mundial es el calentamiento global, derivado principalmente de la huella antropogénica. El aumento desmedido de las acciones que impactan al medio ambiente como el transporte público, el uso de combustibles fósiles, la industria, etc., han desequilibrado los ecosistemas. Las medidas y acciones para mitigar el impacto ambiental no han sido suficientes, esto ha inquietado a la Organización de las Naciones Unidas (ONU), que ha tomado una serie de medidas de carácter internacional como la propuesta de 17 objetivos que ayuden a salvaguardar diferentes ámbitos sociales. Entre las metas para el 2030, esta lo pertinente a "energía no contaminante". México para alinearse a estas estrategias debe tomar acciones concretas y eficientes, estas acciones deben establecerse por medio de la elaboración de políticas públicas estrictas, que logren integrar diferentes áreas científicas y tecnológicas, con una participación oportuna de los diferentes actores involucrados. La propuesta de este documento es la integración de las políticas públicas en conjunto con políticas fiscales y energéticas que coadyuven entre ellas hacia objetivos en común, mediante diferentes acciones como eficiencia energética y aumento de la participación de las energías renovables en la matriz energética del país. México actualmente ha detenido algunas estrategias planeadas en periodos gubernamentales anteriores, que han venido deteniendo una transición energética que logre establecer un óptimo uso de infraestructura, y desarrollar una planeación que permita la diversificación de la matriz energética con la incorporación de fuentes renovables de energía para reducir el uso de combustibles fósiles, que tienen una participación de más del 70%, provocando diversos daños al medio ambiente y a la salud. La ejecución de la estrategia propuesta requeriría la integración y compromiso de los diferentes actores involucrados, por la naturaleza compleja del proceso de formulación de las políticas públicas, los autores proponen trabajar con un marco regulatorio de calidad y con seguimiento entre los diferentes cambios gubernamentales en el país.*

**Palabras clave:** Transición energética; Energía; Desarrollo sustentable; Políticas públicas; Políticas fiscales; Energías renovables; Indicadores energéticos; Matriz energética.



## 1. Introduction

Currently, Mexico continues with a lag in the energy transition and sustainable development, the energy matrix has more than 70% of conventional energy generation for the country's electricity consumption [1]. The insufficient incorporation of alternative sources of energy, and the use of conventional energies in developing countries, contributes to greenhouse gas (GHG) emissions, leading to an increase in pollution rates that cause global warming, a of the world's biggest problems.

The objective of this document is to propose strategies that integrate public and fiscal policies for economic and sustainable development, which allow promoting actions, and promulgation of laws that agree to link various economic sectors for the achievement of energy prospects that allow an efficient energy transition for reducing the ecological and carbon footprint. The Energy Sector Prospects issued by the Ministry of Energy, have defined ambitious objectives for the diversification of the energy matrix, with a high increase in the percentages in the incorporation of renewable energies in Mexico, this agenda has not been achieved in previous periods.

Taking as background the 17 goals for sustainable development agreed by the UN, for the 2030 sustainable development agenda, Sustainable Development Goal (SDG) 7 is the most relevant in terms of energy transition, with the theme of "Accessible and non-polluting energy". Mexico must generate plans where the guidelines of its internal programs are adjusted to international indicators.

The scope of this research, as mentioned, focuses on SDG-7, whose goal is to guarantee universal access to affordable, reliable, and modern energy services [2-6]. In sustainable development and

the taking of measures for energy stability should not be considered separated from economic development to achieve the objectives involving different economic sectors through the integration of smart policies, with execution and monitoring in a governmental regulatory framework.

In Mexico, the study of fiscal sustainability should be placed as a central issue on the public finance agenda, balancing it together with public policy actions [7], allocating funds to R&D projects (Research, Development, and Innovation), for a technological development comparable to the increase in energy consumption, which contributes to energy efficiency and renewable technologies. The planning of guidelines for the economic transition and sustainable development must be regulated under a comprehensive framework of fiscal, economic, energy, and environmental policies substantially, developed in conjunction with the economic sectors and non-governmental organizations that foster an environment of fiscal stimuli for the social and technological development regulating the environmental implications to mitigate the ecological impact. This document is made up of an analysis of the different integration policies and strategies that promote a government framework based on fiscal stimuli that promote the country's energy transition, with an energy efficiency scheme and use of renewable energy, along with technological development. and socioeconomic.

## 2. Background

One of the weaknesses detected in the development of this document regarding the bibliography of public policies in the process of research and analysis of different sources of information is what refers to the argument of the integration of public policies with the different branches of knowledge, that are transcendental



for the efficient execution and follow-up of these policies. Different authors have initiated research on this subject, but it is still necessary to develop research that contributes as a study framework for the methodology and management of integrating public policies. Likewise, it is imperative that there be proper execution and monitoring by government agencies in relation to the integration of public policies, with joint actions from the stage of the country's development plan carried out by the government. Public policies as a subject of analysis and reflection must consider the different branches of knowledge from sociological studies to scientific and technological ones, with contemporary issues applied in governance, with action programs involving collective benefits for social benefit [8]. Public policies can be defined as an integrating process of decisions, actions, inactions, agreements, advancing by government authorities, the eventual participation of individuals, aimed at solving or preventing a situation defined as problematic [9]. The analytical frameworks for the study and public policies must be based on critical junctures such as institutional actions and other mechanisms, due to the geopolitical situation of the country, the integration of policies must be based on a global perspective, with the pertinent environmental implications, the genesis of said public policies aimed at concrete actions for sustainable development, with a focus on being regulatory policies to achieve the established objectives. The idea that public policies have marked the development of the field in the region and the way of thinking about public action in our latitudes, as a method of directing the development and planning of government programs, these policies have a systematic notion (cycle of public policies), which establishes chronological and successive stages, with the idea of following up on problems of a social nature, called "problematization", which is the entry into the agenda, the discussion and

formulation of alternatives, the decision set in motion by government agencies, and finally the evaluation with its feedback with the social system [10].

Regarding energy policies to take the path towards SDG-7, Mexico must promote the broad energy potential for the development of renewable projects. The energy reform was a provision of Mexico as the key measure to comply with the commitments in terms of emission reduction at the national and international level, one of its limitations was that it does not guarantee energy security, in addition to not having been aligned with the guidelines to promote renewable energy [11], to migrate to low carbon power generation strategies.

Strategies within public policies for low carbon must link to fiscal policies as a tool that helps guarantee the energy transition. Fiscal policy can be defined as the range of tax and spending decisions by the authorities that have important repercussions on all aspects of development. For the purposes of this document, the interest of these policies should focus on sustainable, environmental, and socioeconomic matters. Economic growth can support sustainability from an environmental point of view, and reciprocally an implementation of renewable projects with a perspective of the energy transition that entail impacts on health and quality of life, without diverting the vision of socioeconomic development. Fiscal policy can also affect economic growth through the effects it has on the incentives of individuals and companies. These policies implemented in the planning of an agenda for the incorporation of renewable energies would favor its promotion with guidelines for stimuli and tax penalties. Thus, leading to sustainable development, for example, energy subsidies, most countries grant explicit or implicit subsidies to coal, electricity, oil (mainly in crude oil exporting countries), gas, and nuclear



energy [3]. However, the use of energy contributes to many of the most serious environmental problems on the planet, such as overheating of the planet, a product of the greenhouse effect, and damage to property, forests, livestock, and aquatic life because of acid rain, dust, soot, tar, and health problems, mainly of a respiratory nature.

Developed countries use fiscal policy to play an important role in helping to ensure that the use of natural resources is sustainable, and that the environment is protected. In the public budget, taxes are applied that can be directed to guarantee that prices reflect the true social cost of producing goods and services, as well as exert a positive influence on the environment, through the efficient use of natural resources. Fiscal policy is an important factor that determines whether or not environmentally and socially sustainable economic growth is possible, affecting incentives for the economy and production processes to be aligned with ecological balance, and supporting low carbon tax measures. [12].

Fiscal policies have an impact on economic policies, being considered as terms generally designated to the application of certain measures carried out by the authorities to achieve certain ends. Economic policy, as "praxis", has been defined in different ways, the usual comparisons between the definitions used are the affirmation that they are the results of decisions of authority such as the government, they are also the results of political ideologies and other government strategies," J. Tinbergen affirmed in his day that "economic policy consists of the deliberate variation of the means to achieve certain objectives". Referring to different instruments, measures, and actions to face ends and conflicts to obtain results, other terms also designate the treatment and scientific analysis of the actions carried out by governments and other

institutions. In the first sense, economic policy is conceived from the point of view of praxis, while in the second it is considered from a scientific-analytical perspective. These measures have adopted different actions over time, where currently they seek to consider statistical data analysis for decision making, this definition arises as a socioeconomic framework, where fiscal instruments and measures can be placed as an implicit measure for an efficient transition energy that is reflected in economic policies.

D. S. Watson argued that it is not pertinent to speak of public policy separated from the set of different policies (social policies, economic policies, energy, etc.), developed by governments, which are indisputably interrelated among themselves [13].

As previously mentioned, policies must establish a complementary path. At the geopolitical moment in Mexico, which has initiated strategies for the energy transition and development of Renewable Energy projects, there have been setbacks, such as the case of the energy reform issued in the year 2014, as well as the various actions that were contemplated for its execution, such as the case of the Clean Energy Certificates (CER), as stimuli to clean energy, having defined that it did not contain requirements for a growth in the percentage of participation of renewable energies in the country's energy matrix, it opened the way for private projects developed by foreign investment. Likewise, it is consistent to mention "Grid Code" as a strategy that establishes the minimum technical requirements for the efficient development of the electrical infrastructure processes, starting from the Planning phase until the use of this infrastructure, which has remained detained for a lack of follow-up from the current government.

Fiscal policies are useful tools for economic stabilization, with the integration of other

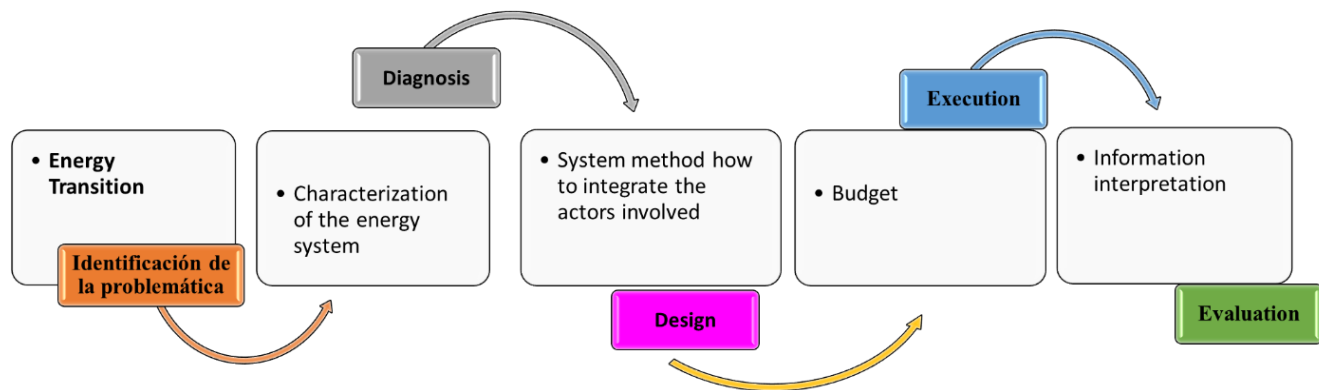


policies and other government measures of financial regulation, in this case, prices and costs of energy production and budgetary expenses directed R&D projects were correlated. with socioeconomic growth in addition to strengthening the energy transition [14-16]. The OECD (Organization for Economic Cooperation and Development), analyzed the impact of fiscal policy instruments on economic growth and social development, found that fiscal stimuli and adjustments were effective for economic growth. He stressed that the main ones are to reduce the volatility of the main economic parameters, the interconnections of economic growth and government regulation with different phases of interconnections were investigated [17].

The instruments of public policies applied with objectives for the energy transition can serve as support towards the achievement of the objectives established in the planning of SDG-7 of sustainable development. As mentioned,

public policies must be integrated to optimize the achievement of objectives and implement better actions, aligning common goals. For the analysis of the problem presented above where the slow energy transition in Mexico is referenced, little citizen participation and the various economic sectors are glimpsed for the genesis of public policies.

This document considering other authors who propose the integration of public policies with different branches of research, proposes that strategy, integrating public policies, fiscal policies, and energy policies. An optimal planning of the objectives, linked to intelligent actions, and the participation of the actors involved in a relevant way, can facilitate the energy transition, without neglecting to consider the difficulty that the proposal implies due to the complex nature of public policies. Figure 1. shows the diagram of the general process for the elaboration of public policies.



**Figure 1.** Cycle of public policies, exemplifying the energy transition

Energy policies must examine the current situation facing the country, to explore future solutions, and avoid a possible energy crisis, which affects multiple areas of the national economy, due to this problem it is necessary to carry out an energy transition that gives greater

guarantee, aligning to the national objectives of security, equality and sustainability, in energy matters and for it; developing an institutional framework that reorganizes the electricity industry. The governments of different countries have engaged in the development of regulations



and related policies to promote environmentally friendly renewable energy, generation together with conservation strategies and technological innovations. It is important to develop energy policies that provide relevant and appropriate policy recommendations for end users.

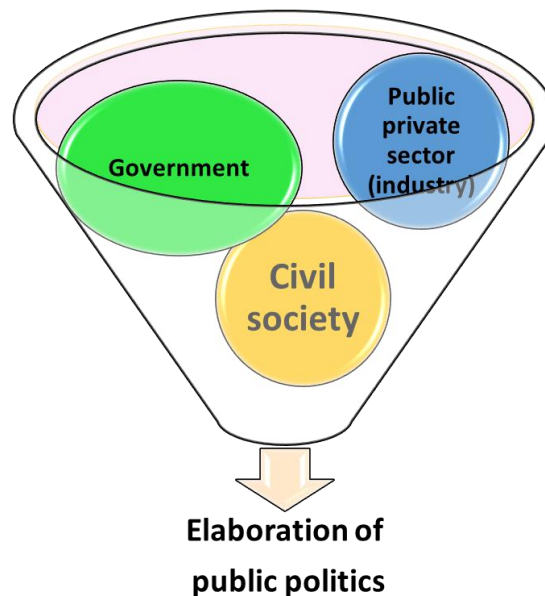
Projects with renewable energy sources have not filled the gap, they have managed to have a notorious participation in the country's energy matrix [18]. Its development may be secondary to a possible energy crisis.

Due to the trend of energy consumption in Mexico that has been due to the dynamics and structure of the national economy and the growing demand for energy services, it should be considered that it could arise from the accelerated growth that is not equivalent between national energy consumption and the economic activity, due to the current population growth. Mexico requires establishing public policies in terms of population density per area, since it is different in each federal entity, and analyzing the energy systems of the federal entities, and the energy distribution system, because cities have greater demand. energy for transport, buildings, industries, and public services.

In the European Union, the core of European energy policy is made up of a series of measures aimed at achieving an integrated energy market, security, energy supply, and sustainability of the energy sector, with actions such as:

- Guarantee the operation of a fully integrated internal energy market, fostering the flow of energy through adequate infrastructure and without technical or regulatory barriers.
- Improve energy efficiency and reduce dependence on energy imports, reduce emissions and boost employment and growth.

- Promote research in clean energy technologies with low carbon emissions and prioritize research.
- Options to mitigate high energy prices [19].



**Figure 2.** Main actors involved in the development of public policies.

The area of energy is one of the key areas for sustainable development and also tends to achieve important advances, using available resources and technologies, are energy policies, initiate a path towards technological change to achieve objectives that include guaranteeing the supply of energy, limit pollution, environmental, minimize climate change, replace fossil sources with renewable sources, etc. With balanced actions in social, economic, and environmental aspects to achieve sustainable development. Sustainable Energy Policy Framework must be at the global forefront in actions against climate change, with "green agreements" that provide possible solutions to the sudden climate crisis, with guidelines for a comprehensive energy policy framework that encompasses climate, energy and environmental, industrial, economic and social environments in different settings, with sustainable investment, and "green" tariff



agreements enacted with fiscal policies and industrial policies. “A paradigm shifts from the fossil fuel economy to “zero carbon” is required in a way that is socially and politically viable” [20].

The coordination of fiscal and economic, energy policies must focus on increasing public welfare and maintaining macroeconomic stability in the long term, the integration of combined policies and aligning their actions and tools from planning must have common objectives and guidelines and must ensure a comprehensive mix of target conditions such as inflation and energy stability.

The efforts of developing countries like Mexico to achieve sustainable and low-carbon development must be aligned with guidelines that seek the sustainability of public finances and attention to the needs of investment in well-being, investment and sustainability, environment, integrating low-carbon guidelines, as well as the efficient administration of these policies, a greater scope of the percentages of the objectives at the national level should be envisioned from the perspective of the requirements of civil society for a changing culture that encompasses the entire society, public and private institutions, and the government, managing to execute the pertinent

### 3. Methodology

Public policies are considered a subject of reflection for an extensive academic population as a discipline where different areas of knowledge such as law, politics, sociology, scientific-technological areas, etc., should be involved, with a contemporary theme that applies to the governance, in a social and democratic State of law like the Colombian one, which implements action programs for the benefit of the collective, in order to improve situations of poverty and violence that affect modern society. The figure 2 shows the intervention of the government, the private sector, and civil society, for the elaboration of public policies.

measures and the creation of future laws that require sustainable practices, where each of the actors involved paralyzes in a committed and responsible manner [21]. Especially the government and citizens will have to 'get involved' in the governance process, sustainable politics would have to be a collectivist policy, obliged to take care of the global commons, through practices and actions that move the country towards an energy transition, benefiting the everyone's economy without affecting the ecosystem [22]. Figure 3 shows the entries of the main policies that are suggested to interact with the energy transition.

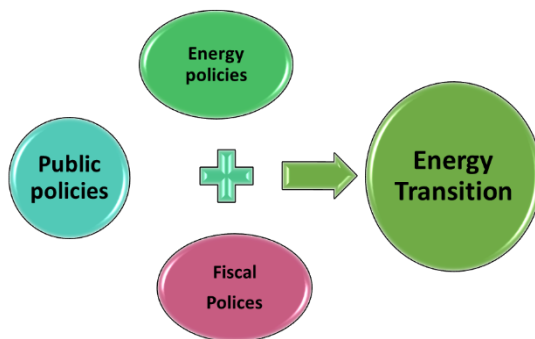


Figure 3. Interaction of public policies for the energy transition



To promote sustainability in terms of SDG-7, coordination, and integration of policies in the technological, fiscal, industrial, and financial, under schemes of regulatory measures.

The incorporation of strategies for the integration and alignment of the different economic sectors with an efficient link with non-governmental organizations, society and the government for the promulgation of public and fiscal policies; the development of plans and goals aligned to programs that promote strategic management for the use of public and private economic resources for the development of sustainable projects and the application of renewable technologies, which have a positive impact on reducing the carbon footprint and ecology, for the energy transition and sustainable development.

The integration of public policies, in countries like the United States of America, is an emerging paradigm and is at the center of the energy debate, it adopts a holistic vision of the electricity, gas, and heating sectors to offer a clean energy system, reliable and affordable. Through the use of synergies within and between sectors. These policies should aim to increase flexibility in the energy system, maximize the integration of renewable energy and distributed generation, reduce environmental impact, with a technical perspective, and focus on economic, regulatory, and political dimensions [23, 24]. In Europe, public policy integration, also called sectoral coupling, is recognized as a strategic means to make Europe the first climate-neutral continent by 2050 in the new European Green Deal [25]. The systems, sustainable actions that allow the energy transition, and sustainable development are considered possible solutions to the problems of energy security, climate change, urban air quality, and public health.

The actions carried out within the elaboration of public policies must be addressed under a systemic approach, which integrates all the components, relating them and incorporating them for their analysis and sustainability. The adoption, evaluation, and integration process that occurs in the different public policy scenarios and its integration with other scientific disciplines and involvement with different actors, must be addressed as a process of dynamic behavior due to their nature [26].

### **3.1 Process of design and implementation of public policies for the energy transition**

As referenced in the theoretical framework of this work, all policies must start from a problem or public need, in the specific case of this analysis they must promote an integration of energy and fiscal policies for the energy transition.

This phase can be considered as a pre-design stage since the need will be analyzed and defined in greater depth in the diagnosis stage.

The identification of problems and needs can be done through different mechanisms, through the involvement of all the actors involved, including citizen consultation, according to many authors who analyze the behavior of public policies, the participation of the public is substantial. civil society to increase the possibility of success of public policies, other instruments are the analysis of historical data, the evaluation of the economic, social, and environmental conditions of a territory, as well as a comparison of international political systems that meant a case of success in solving similar problems.

Public policy gurus always extend the great complexity of this topic, and the detection of different needs and sub-problems during the different stages of the design, execution, and





monitoring-evaluation process, and each strategy and action must have instruments diverse as the budgets.

An extended way to analyze the process of the previous diagram is according to the following point:

- The definition of the problem or need
- The formation of the agenda
- Construction of alternatives
- Decision making
- The policy implementation process
- Implementation as a problem
- Studies on the implementation process
- The perspectives for the analysis of the implementation
- Monitoring
- The evaluation

Analyzing the previous points, the energy transition tending slopes where technological projects are required, and from an innovation approach in government management, it is important to emphasize that the principles of design thinking or "design thinking" also apply to the design of public policies, since this approach is focused precisely on solving human needs, also throughout the evolution of the process with the approaches around the evaluation.

The public policy process should be the path toward the energy transition and emerge from analytical frameworks that focus on analyzing the critical junctures of institutional arrangements and feedback mechanisms that affect change and integration with fiscal policies [27, 28].

The development of integrated public and fiscal policies can allow the exploration and potential of the various mechanisms and instruments that have not yet been used in the country to be strengthened, with the integration of fiscal policy

and public policies for the energy transition. Examples of some instruments used in other countries:

- Renewable energy payment contracts or Feed in Tariff (FiT), for its acronym in English, offer contracts to generators of renewable energy, generally based on the cost of generation of each technology.
- Quotas and certificates, are the minimum renewable generation quotas, can be implemented through the well-known "Renewable Portfolio Standards (RPS), mechanisms that encourage and sometimes force power generators to produce a specific fraction of electricity through renewable energy. Renewable Purchase Obligation (RPO, for its acronym in English) is understood as the obligation to purchase renewable energy. This instrument obliges all electricity distribution concessionaires to purchase or produce a certain minimum percentage to cover their needs from renewable energy sources.

Both net metering and net billing are mechanisms by which grid-connected renewable electricity generators can be fully or partially compensated for their electricity consumption.

Financial and tax incentives encourage investments in renewable energy, financial incentives can be created. A financial incentive to promote renewable energy should provide monetary benefits to support the development and use of these energies.

- The Energy Attribute Certificates (EAC), which can be understood as "contractual instruments" that indicate the source from which the energy comes.
- REC (Renewable Energy Certificates).
- Green labels to increase the incentives for the electric generator to invest in renewable energies.



- Tax incentives and penalties for efficient energy use (green bonds, clean energy certificates).

These mechanisms constrain and encourage energy generators and users to take measures on the consumption of renewable energy, as well as price regulation (Price Policy) and tax for the promotion of alternative energy, because said rates and Smart applications can induce an increase in demand for renewable energy generation by collaborating with consumers and strengthening the participation of the industrial sector as one of the largest energy consumers, and contributing to the energy transition [29].

The proposal of the work is to propose the development of a model that manages the actions of the actors involved "stakeholder" and allows the coordination of the instruments of the various policies under a comprehensive model that contributes to solving the problem of the energy transition.

This paper argues for the development of fiscal instruments under a policy model that focuses and directs the energy transition in an optimal way with actions by the authorities interacting for

the benefit of consumers, that is, a model that allows coordinating the management of the instruments. fiscal policy and public policy [30], and regulate the price of electrical energy, with incentives and subsidies for renewable energies, so that each of the consumption sectors significantly influences the amount and rate of growth of consumption of electricity. alternate sources of energy.

In the case of Mexico, the Head of the Secretariat of Energy (SENER) mentioned that the energy transformation has begun. On the other hand, the SENER secretary indicated that this financial capital can now enter the country as private investment and favor the State with considerable income from oil tenders and the prices obtained in clean energy electricity auctions. Figure 4 shows an interaction model of public policies, with fiscal policies as those in charge of developing fiscal proposals for the investment of R&D projects, as well as with energy policies for the development of actions that encourage the actors involved in sustainable development in Mexico. Figure 4 shows an integrated policy diagram with some actions and strategies, linked to all stakeholders in conjunction with R&D projects for the energy transition and sustainable development.

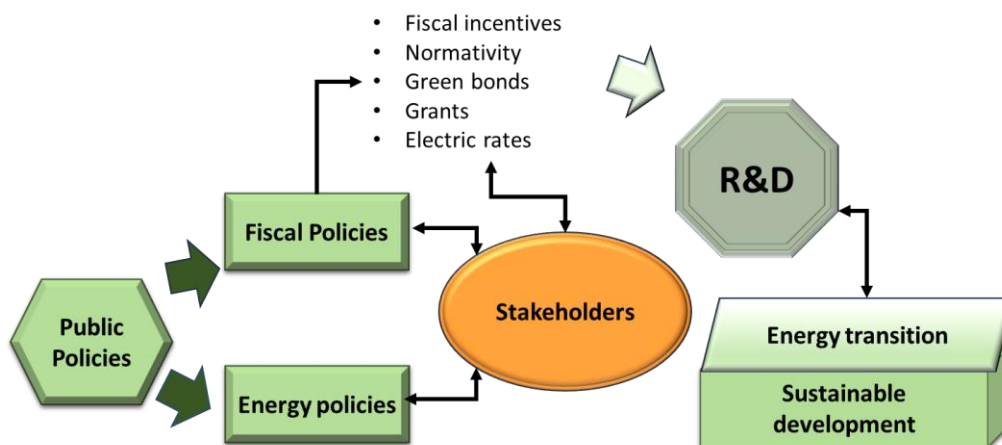


Figure 4. Policy interaction diagram with stakeholder and R&D projects for the energy transition



#### 4. Results and discussion

In the analysis for the preparation of this document, some of the international experiences were reviewed, finding that the impacts of implementing this type of policy would respond to other benefits associated with renewable energy and energy efficiency technologies such as R&D projects [31], under the financial resources obtained by subsidies, grants, tax incentives, or other fiscal instruments that promote and finance the development of these projects in research centers, in the same way reduce the subsidy to electricity rates.

The implementation of the integration of fiscal and public policies to transition to electricity generation with non-polluting technologies could arise under different factors. In the case of Mexico, proposing a financial scheme that encourages the generation of electrical energy

The inconsistency of those policies leads to significant destructive environmental and economic consequences.

This comprehensive model proposed where the investment of the different public and private actors is proposed that allows obtaining analytical solutions and giving greater balance to the country's energy system with an intelligent use of various sustainable strategies and instruments, can help to give results in the energy problem current. An energy policy with political disciplines and quality tax management can speed up the energy transition and sustainable development.

Energy policy must minimize dependence on fossil fuels, it is essential to design an energy policy that substantially impacts the value of the industrial sector, a more accurate diagnosis of hydrocarbon inventories and renewable energy potential is required, linked to the construction of

with clean technologies would not only respond to the objectives of reducing polluting gases and GHG that the Law for the Use of Renewable Energies and the Financing of the Energy transition.

Promoting electricity generation technologies using renewable resources also helps to mitigate the financial risk that the electricity subsidy generates for the stability of the country's public finances.

For a period, public and fiscal policies have developed in advanced economies and contributed to the energy transition. The practical experience confirmed the reasonableness of the convergence of these scientific concepts in a close interaction between public and fiscal policy. Well-coordinated regulatory measures, combined with a quality of institutions, would increase the efficiency of the energy transition.

a political consensus with a condition that enables the implementation of the programs it contains through the different six-year periods, involve private sector actors, reinforcing the regulatory framework of the industrial sector, in parallel, attend from the angle of sustainable development and economic growth.

Policy coordination is the key prerequisite for the energy transition, sustainable economic growth, and social development, which are practically unattainable without aligned policies and proper fiscal regulation. In the long term, fiscal policy must ensure a comprehensive mix of inflation-targeting conditions and the adaptive use of tools to achieve the energy transition.

#### 5. Conclusions

The coordination of fiscal and energy policy should focus on increasing public welfare and maintaining long-term macroeconomic stability,



with theoretical and methodological bases for the formation of different policies, to ensure sustainable economic development. It is advisable to create actions and measures for the budget and public spending in a balanced way, with functional structures, and continue the guideline of the possible results of the integration of the various policies, which may have resulted in the behavior of the GDP.

For the development of this proposal, a common effort must be made by all the actors involved, mainly to achieve quality governance in Mexico, the policy integration methodology has been used in countries with successfully developed economies. The contributions of many authors agree that the processes and achievements of objectives cannot be obtained in isolation in public policy issues. In future research, analysis of the processes can be carried out to raise the awareness of those involved, mainly civil society, as part of the energy user and directly affected by the externalities caused by the low quality of energy and the impact on the environment that it causes. a negative environmental impact, global warming, and damage to health from the use of conventional energy.

## 6. Authorship acknowledgment

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