

The Role of Public Institutions in Enhancing International Cooperation to Promote Local Development Mechanisms _ The case of APRUE*

دور المؤسسات العمومية في تعزيز التعاون الدولي لترقية آليات التنمية المحلية _ حالة الوكالة

الوطنية لترقية وترشيد استخدام الطاقة APRUE

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Abstract:

Due to its multiple dimensions, and its great impact on economic, social and environmental issues, the field of energy dominates the most of development Algerian policies. In this regard, public institutions, such as “National Agency for the Promotion and Rationalization of Energy Use: APRUE”, have been created to achieve a sustainable development through energy efficiency. The Agency's main role is centered on the development, the implementation and the follow-up of national energy efficiency programs. Furthermore, it contributes through international cooperation in the preparation the required mechanisms and measures that will enable local authorities, to better understand the issue of energy efficiency, as well as, energy saving. However, despite the importance of the role played by this agency, the absence of an actual evaluation of the agency's activity resulted in difficult determination of how and to what extent APRUE benefits from international cooperation in a vital field such as energy. Consequently, this leads to a lack of distinction between approaches and projects that raise the capabilities and the performance of local collectivities.

Keywords: sustainable development; energy efficiency; local development; renewable energies;

* The National Agency for the Promotion and Rationalization of Energy Use

JEL Classification Codes : Q01 ; Q48 ; O13 ; P32 ;

ملخص:

يطغى موضوع الطاقة على معظم السياسات التنموية في الجزائر، وطنية كانت أم محلية، نظرا لأبعادها المتعددة وأثرها الكبير على الشؤون الاقتصادية، الاجتماعية والبيئية. وبهذا الصدد، وضمن إستراتيجية الدولة لتحقيق التنمية المستدامة وتعميم موضوعها على المستوى المحلي، تم إنشاء مؤسسات عامة على غرار الوكالة الوطنية لترقية وترشيد استخدام الطاقة APRUE والتي يتمحور دورها الرئيسي حول تطوير وتنفيذ ومتابعة برامج كفاءة الطاقة الوطنية. كما أن APRUE ومن خلال التعاون الدولي تقوم بالمساهمة في إعداد الآليات والتدابير التي من شأنها تمكين السلطات المحلية في صورة البلديات من فهم قضية كفاءة الطاقة على المستوى المحلي بشكل أفضل في سياق تجسيد التنمية المستدامة. وبالرغم من أهمية الدور الذي تقوم به هذه الوكالة، إلا أن غياب تقييم فعلي لنشاط الوكالة هو ما يجعل من الصعوبة تحديد كفاءة ومدى استفادة APRUE من التعاون الدولي في ميدان حيوي كالطاقة، مما يؤدي إلى عدم التمييز بين المناهج والمشاريع التي ترفع فعليا من قدرات وآداء الجماعات المحلية.

كلمات مفتاحية: تنمية مستدامة؛ كفاءة الطاقة؛ تنمية محلية؛ طاقات متجددة؛

تصنيفات JEL : Q01 ؛ Q48 ؛ O13 ؛ P32 ؛

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1. INTRODUCTION

The international relationships based on the use of energy have been developed greatly in recent years, especially in terms of rationalizing energy consumption and diversifying its resources. Today, energy research and development is seen worldwide, as a key development activity that can maintain economic growth, as a result, creating jobs. In addition, the pursuit of what's called energy efficiency can provide us with aduecate solutions to face problems related to the supply and production of electricity, and also the diversification of investment options in this domain. In fact, the national consumption of energy has highly increased due to an increase in the rate of acquisition of electrical equipment, and the expansion

of urban areas, as a result of the construction of many infrastructures intended for public and individual exploitation, especially on a local scale. It has been proven that investing in energy efficiency usually costs less compared to investing in energy generation.

There is a necessity to exploit international partnership programs and agreements in evaluating the possibilities of energy saving. This is to determine the procedures and measures to be implemented in this field, in order to control energy consumption which could support local development. For this purpose, the paper will address the role of the National Agency for the Promotion and Rationalization of Energy Use APRUE as a public institution whose activities fall within the embodiment of closely related projects between international partnership programs and local communities. This which would promote local development mechanisms through energy efficiency and international partnership programs for development, by reviewing its current strategy and future goals, and what has been recorded through a network of bilateral and multilateral relationships. Thus, the question that is raised is: How APRUE could benefit from international cooperation in the field of energy efficiency to improve and upgrade development mechanisms on the local level.

2. Sustainable Local Development and Energy Efficiency:

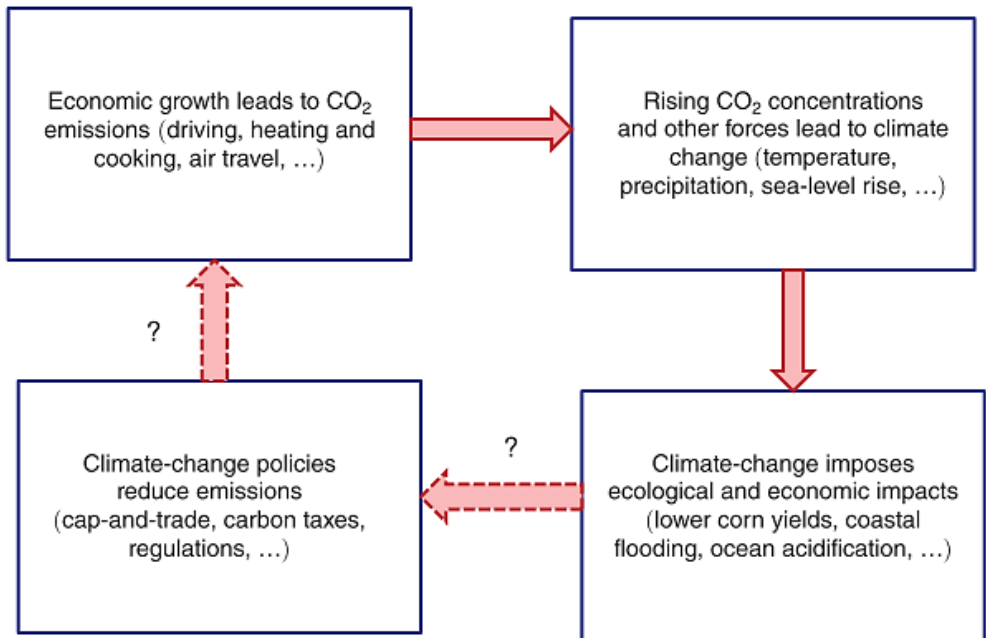
The sustainable local development still seems less realistic and less relevant to the majority of people, as some consider its content to be a very abstract idea, due to the difficulty of defining it precisely. It would also be wrong to say that the concept of sustainable local development can be defined in one valid way, as each local area has its own characteristics, which makes it difficult to develop a unified definition for it. Therefore, we tried to address the most appropriate definition commensurate with the subject of our article, where sustainable local development can be defined as a process in which the members of the local community participate through the available measures and mechanisms in shaping their own environment; in order to improve the quality of life of the resident population.

This process is a human phenomenon that requires an integrated mechanism of economic, social, cultural, political, technological and environmental factors, where projects and businesses arise. In addition to the importance role of institutions and policies that can mobilize all stakeholders in the local community to contribute in improving conditions

and meeting public and private needs at the regional level (Sekula, 2002). Furthermore, Local development is a highly uneven process, producing diverse economic, social and environmental outcomes grapple with processes of growth.

Accordingly, the aim of this issue is important to international, national, regional and local institutions of government and governance. It highlights the evolving contexts of local and regional development, as well as, the challenges they pose, particularly for local and regional actors in linking and reconciling top-down and bottom-up approaches (Pike et al., 2017). Based on this, the sustainable local development is well studied strategy designed to be applied at the local level, in an area with a predetermined human dimension. i.e., socially, economically, culturally and regionally. It aims to improve the situation of all local community's members without endangering their future (Blair & Olpadwala, 2019).

Fig 1. The Circular Flow of Global Warming Science, Impacts, and Policy



Source: (W. Nordhaus, 2019, p. 5)

While energy efficiency generally means using or consuming less energy than before to obtain the same amount of equivalent services (Jaglin & Verdeil, 2013). As our daily activities are energy-intensive, and by increasing energy efficiency means consuming less energy. As a result, it will be possible to reduce greenhouse gases emissions that are harmful to the environment, and at the same time energy supplies will be secured and various costs will be reduced. Therefore, energy efficiency is a major factor

in development and the economy (Akram et al., 2020).

In the literature, this has been confirmed by recent scientific research and studies, the most important of which was presented by Nordhaus (W. D. Nordhaus, 1976), who highlighted the relationship between climate change and economic growth, which is an essential factor of development. Thanks to the Nordhaus's model, it became possible to predict or estimate the results and implications of environmental policies which are mainly related to the energy sector on economic growth (Christensen et al., 2018; W. Nordhaus, 2019).

3. The National Agency for the Promotion and Rationalization of Energy Use APRUE:

It is a public industrial and commercial establishment that was created previously under the supervision of the Ministry of Energy. It is currently managed under the tutelage of the Ministry of Energy Transition and Renewable Energies, recently created in 2020 (Mteer Decree N° 20-322, 2020; Mteer.gov.dz, 2022). The Agency was created by Presidential Decree No. 85-235 of August 25th, 1985 (Decree No. 85-235, 1985), amended (Executive Decree No. 92-73, 1992) and supplemented by Executive Decree No. 04-314 of September 25th 2004. This later defines its missions and the objective of its establishment mainly related encourage and enhance energy management at the national level. This can be achieved by first, promoting energy savings in all sectors of activity. Second, contributing to the emergence of a sustainable development of energy efficiency, through setting up energy efficiency projects and programs included in the framework of the partnership in consultation with all concerned partners. Third, giving visibility to potential investors. Finally, ensuring the implementation of activation and coordination schemes for the energy efficiency, and pursuit The National Energy Management Program (Decree No. 04-314, 2004; Decree No. 21-106, 2021).

The Agency is also called upon to propose long-term developmental guidelines for energy management as well as medium-term programming for its development in terms of objectives to be achieved and means to be implemented. It also treats requests and verifies files that seek to benefit from the advantages granted by the National Fund for Energy Management. Moreover, there are other missions that can be mentioned as follows: (Aprue.org.dz, 2022b)

- Creation of the "Energy Management Observatory" within the agency's departments, charged with preparing programs and future energy

studies as well as evaluating the medium and long-term potential for energy management;

- Organizing and disseminating information related to the needs of developing energy management, promoting communication, and sensitization in this field in cooperation with relevant partners, including economic agents, professionals, schools and the general public;
- Organizing special training programs for those interested in the field of energy management, in partnership with the concerned sectors such as education, universities and schools, professional associations...;
- Developing energy management through partnership, by qualifying programs and projects that have been prepared with actors in energy management (industry, transport, housing, development of renewable energies, local communities) to benefit from the resources of the National Fund for Energy Management;
- Framing legislative and regulatory proposals on energy management as well as proposals on financial, tax and customs benefits that may be granted to energy efficiency projects under applicable legislation and regulations;

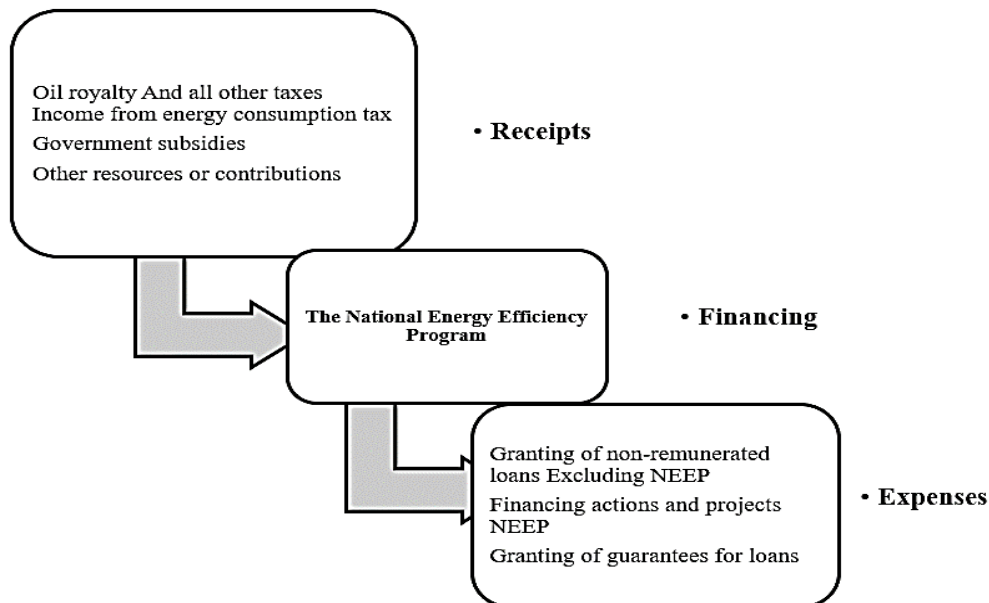
4. The institutional framework for The National Energy Management Program:

This national program of Energy Management allows for framing the scope in which the APRUE agency can operate, and to conclude internal or external partnership necessary for the purpose of realizing its objectives. The laws and regulations included in this plan stipulate that programs and procedures related to energy efficiency must be designed, developed and implemented in consultation with the decision-makers of the relevant sectors such as the industrial and construction sector enterprises, the importers and sellers of equipment and supplies, especially the organs affiliated to the local authorities and consumers (GOUAREH, 2017).

Law N° 99-09 of July 28th, 1999 related to energy management defines the conditions and means of supervision and implementation of the national policy for energy management, which includes all measures and procedures implemented with the aim of rational use of energy, development of renewable energies and minimization of the repercussions and impact of energy use on the environment. Managing energy use is considered as an activity of public interest, the purpose of which is to promote technological progress and improve economic efficiency (APRUE, 2010). Thus, energy management has confirmed its importance at the

strategic level, so the State continues to put all the means, in particular financial incentives, for the realization of large-scale actions and projects. The following figure shows the approved funding mechanism for the energy efficiency program:(BENDIMERAD, 2017)

Fig 2. Financing of the National Energy Efficiency Program NEEP



Source: (BENDIMERAD, 2017, pp. 6 & 7)

APRUE, which has implemented the National Multi-Year Energy Management Program, has achieved encouraging results in the previously launched projects it launched during the first half of 2022 aimed at energy management, according to a press release last August from the Council of Ministers (Ministère des Finance, 2022). The projects launched by APRUE are part of a dynamism that supports the development of an economy efficient in energy, namely, particularly in the energy-intensive sectors of construction, transport and industry, while preserving competitiveness, which same source noted as follows: (Ministère des Finance, 2022)

- For the transport sector, APRUE to encourage inter-energy substitution, such as the use of less polluting and available fuels, such as Gas Petroleum Liquefied for carburizing LPGc. To this end, during the first months of 2022, APRUE has already enabled the conversion of 41.200 gasoline combustion vehicles to LPGc out of the 50.000 planned, through the workshops of 549 installers, selected by the Agency. These installers are spread over 52 wilayas, thus creating 1.700 direct jobs, the statement said, adding that 50% of the installation costs are borne by

the State, for a total amount of aid, allocated to the operation, of 1,75 billion dinars. A second project of 100.000 conversions has already been launched and should be finalized by the end of 2022, through 573 installers and for an aid amount of 2, 8 billion dinars, stressing that these conversions will save 225 million liters of gasoline annually and avoid direct emissions of more than 500,000 tons of CO₂.

- For the construction sector, APRUE has implemented several agreements during this first half of 2022. The commitments, currently being implemented, concern the installation of 25.350 efficient public lighting fixtures, the installation of 1.000 heaters - solar water, as well as the thermal insulation of 1.000 existing homes, of interested and eligible individuals. In addition, APRUE has launched a call for tenders for the acquisition of 3 million standardized LED lamps for interior lighting, from national manufacturers, to make them available to individuals, with a contribution from the State. up to 50% of the selling price.
- For the industry sector, APRUE has set up two technical, methodological and financial systems intended for industrialists: decision support and investment support. It should be noted that Algeria, which is betting on the enormous potential of energy efficiency, is aiming for a reduction of at least 10% in its final energy consumption by 2030, compared to the reference year 2020.

5. APRUE and International Cooperation:

The Agency attaches special importance to international cooperation, especially with regard to experience in developing and controlling energy management programs, and providing international expertise in addition to transferring knowledge, especially to local managers and specialists (Aprue.org.dz, 2022b).

Through operations registered in the framework of international cooperation developed by a network of bilateral and multilateral relations, APRUE is charged for promoting the Algerian energy management policy at the international level and introducing the characteristics of the Algerian energy market. Among the most prominent international partners of APRUE:

5.1. Mediterranean Association of National Agencies for Energy Management “MEDENER”:

MEDENER is an international non-profit organization with its current headquarters in the Spanish capital, Madrid. It was established in 1997 in Tunis, according to the recommendations of the Euro-

Mediterranean Ministerial Conference held in November 1995 in Barcelona. The organization's slogan "energy efficiency and the promotion of renewable energies" is considered two prerequisites for the success of the energy transition, and is consistent with the organization's goals it seeks to achieve (medener.org, 2022). MEDENER works to unite the activity of national agencies in the Mediterranean region responsible for energy efficiency, as it currently includes national organizations for twelve countries on both the northern and southern shores of the Mediterranean, which include APRUE.(MEDENER Network, 2014).

Besides, MEDENER considered the monitoring of detailed energy efficiency indicators by sector and use to be an extremely interesting tool for analyzing trends and public policies in the countries. So, MEDENER arranged efforts between the countries of the southern and eastern Mediterranean to set up systems for monitoring energy efficiency. In particular, between 2010 and 2013, the MED-IEE1 project made it possible to develop energy efficiency indicators for these countries, including Algeria (MEDENER, 2014).

Furthermore, MEDENER initiated in May 2018 the Mitigation Enabling Energy Transition in the Mediterranean Region “meetMED” Project, which was developed in partnership with the Regional Center for Renewable Energies and Energy Efficiency RCREEE, funded by the European Commission. Its main objective is to contribute to the energy transition in 8 target Mediterranean countries, including Algeria, through regional cooperation within a team based in Brussels, coordinates the partners and experts mobilized in the project which covers four components: support for public policies in the area, capacity building and awareness-raising of actors, promotion profitable investments and support for the Union for the Mediterranean Platform (Barra, 2019; Mairet et al., 2020).

The meetMED is a two phases project, the first was spread over two years (2018-2020) for a total amount of 1.5 million Euros, and consisted of a strategy which should Enabling the energy transition, increasing security of energy supply along with climate mitigation in the region, thereby contributing to the greater development objectives of poverty reduction, economic growth and job creation. While the second phase includes renewing the meetMED project for other objectives, of which the European Commission allocated 5 million Euro in direct subsidy (Barra, 2019; Mairet et al., 2020).

5.2. The Union for the Mediterranean “UfM”:

The Union is an intergovernmental institution headquartered in Barcelona, bringing together 42 countries of the European Union and other countries of the southern and eastern Mediterranean, including Algeria. As this organization is a permanent structure dedicated to the Mediterranean Intergovernmental Partnership to promote dialogue and cooperation in the Euro-Mediterranean region (Ufmsecretariat.org, 2022).

The UfM believes that the Mediterranean local communities have a central role to play in the energy transition. The region is rich in renewable energy sources, such as wind, sun and water, having therefore the potential to promote the shift towards more sustainable, low carbon energy systems. There is also a potential to increase energy efficiency through the development of new technologies in areas. Investments on renewable energies and energy efficiency will develop local jobs and local qualifications as well as reduce the financial burden for importing fossil energies. Thus, in order to address these pressing issues affecting the Mediterranean region, local authorities of cities through bottom-up approach, are in the best position to identify actions that best meet their local needs and to carry them out on the ground, as they can design and implement policies that take the local context into account (UfM, 2018).

Therefore, the second edition of the UfM Energy and Climate Business Forum gathered, in 2019, local authorities, stakeholders, private sector investors, international financial institutions, and government representatives with the aim of Identifying business opportunities and innovative solutions with potential of replication, enhancing cooperation and networking, and promoting tangible and innovative financing solutions, private investment and public private partnerships in the Euro- Mediterranean region (UfM, 2019).

5.3. The Arab Ministerial Council for Electricity:

This council consists of the ministers responsible for the electricity or energy sector in the Arab countries. It was established based on the decision No. 5394 of the League of Arab States Council in its 101st ordinary session on March 27, 1994. The Council aims to develop cooperation and coordinate Arab policies in the fields of electric power production and diversification of its sources, taking into account environmental considerations. Among most important council's committees, the Electricity Experts Committee, which works to follow up on issues related to electricity and Arab electrical interconnection projects. Other one is a committee of renewable energy and energy efficiency experts that follows

up on renewable energy issues, as well as issues of energy production and use efficiency (AMCE secretariat, 2010; Lasportal.org, 2022).

Algeria's Arab partnership is embodied through its participation in the events organized by the Arab Ministerial Council for Electricity where the APRUE agency is Algeria's representor. For example, as part of the celebration of the Arab's Energy Efficiency Day, which was set on May 21, 2015, a competition was launched for the best energy efficiency project in the Arab countries. The purpose of this competition is to improve energy efficiency in Arab countries and encourage innovative initiatives and products that can contribute to energy conservation (AMCE secretariat, 2015).

6. Events and projects implemented by APRUE within the framework of the international partnership and related to local development:

APRUE, by exploiting its median role through its field of competence that allows it to coordinate between of the concerned ministries, it has implemented many activities and projects within the framework of the international partnership related to local development, , which include the following:

6.1. European Union support for renewable energy sector and energy efficiency in Algeria :

EU partnership aims to support Algeria's renewable energy and energy efficiency strategy, as articulated on, "National Renewable Energy Program 2015-2030"; adopted in 2011 and updated in 2015, the objective of which is the installation of 22 gigawatt of renewable electricity capacity by 2030. This program is based on the achievement of the planned capacity, creation of an associated industrial sector, and the establishment of support mechanisms for the promotion of the program and the involvement of research and development organizations; also aiming to promote a sustainable energy efficiency market with the objective of saving 63 million tons of oil equivalent by 2030, i.e. 40% of current total energy consumption (CEREFÉ, 2020; UE, 2017).

This EU support revolves around three axes: Institutional, policy and regulatory support; Support in the field of renewable energies; Support through technical assistance in the field of energy efficiency. The coordination of this partnership is in institutional form between the various organizations and stakeholders placed in the energy sector in Algeria, including APRUE. The estimated EU contribution to the program budget is 10 million Euros, which is divide as follows:(UE, 2017)

Table 1. Indicative budget of EU program (in Euros)

Activities	EU contribution	Algerian Contribution
Procurement of services under direct management for support technical assistance	8.800.000	
Supply contracts (software, measurement and verification equipment, etc.)	300.000	
Ministry of Energy: Supply contracts		1.000.000
Evaluation and Audit	200.000	
Provisions for contingencies	700.000	
Totals	10.000.000	1.000.000

Source: (UE, 2017, p. 15)

In the same context of the European partnership in energy transition, APRUE has developed international actions, particularly in bilateral cooperation with homologue agencies such as the French agency for the environment and energy management ADEME. Through this, they can participate in the 2021-2022 action plan in line with previously launched the actions, which essentially target energy promotion in the building sector. moreover, the cooperation with “Gesellschaft für Internationale Zusammenarbeit_GIZ” consider as Algerian-German platform which is that promotes bilateral exchanges on the themes of energy policy in several forms of activities and projects (ADEME, 2017; Aprue.org.dz, 2022a; Denker & El_Hassar, 2014).

6.2. The Cleaner Energy Saving for Mediterranean Cities Project “CES-MED”:

The “CES-MED” project is an program funded by the European Union for a total amount of 4.453.000 Euros, to provide training and technical assistance, responding to the desire to establish close bilateral ties and support local and national authorities in European Neighborhood and Partnership Instrument “ENPI” beneficiaries (MAKDISSI, 2016). This project's interest doesn't lie only in the economic benefits resulting from these relationships, but also in the fact that the European Union cannot achieve their goals in the field of energy, migration and the environment without the cooperation of other countries, especially closer countries such

as Algeria. This is done within the framework of a comprehensive vision to help these countries respond more effectively to the challenges of sustainable policies. These efforts include raising the sensitization of the local population regarding sustainable local policies, exchanging knowledge and experiences, as well as building permanent partnerships between local authorities in the European Union and their counterparts in the southern Mediterranean countries (ceps.eu, 2022; EuropeAid, 2014).

In order to embody this project on the ground, three municipalities were chosen: Boumerdes, Batna and Sidi Bel-Abbes to be part of this experience that brings together directly in the framework of a partnership between an international organization such as the European Union and local collectivities represented in the mentioned municipalities. Here, the APRUE plays a role The mediator between them to generalate this partnership and diffuse it as a model for other municipalities or local authorities in the future. As there were consultations of funders of this type of project, whose mission was to select the funders of climate funds likely to be interested in this type of urban project in the region, the table below gives an overview of the most active funders for Algeria. (Perroy et al., 2018).

Table 2. Sum of climate-development finance-commitment 2015 USD thousand

Row Labels	Amounts
EU institutions	10.979,99
France	56,14
Germany	9.299,79
Greece	136,30
Italy	15,34
Japan	29,07
Korea	116,72
Spain	3,89
Sweden	84,38
Grand Total	20.721,62

Source: (Perroy et al., 2018, p. 17)

6.2.1. CES-MED project in the municipality of Boumerdes:

The municipality of Boumerdes, which is located east of Algiers, occupies a strategic position through which the main axes of the road network pass. Therefore, the expansion of the road transport network, that is a sector consumes large of energy, remains one of the main sources of air pollution and greenhouse gases emissions in the region, where is inhabited by about 155 thousand people. The city includes a large number of national

institutes in addition the University of Mohamed Bougherra, in addition to that Boumerdes and its neighboring areas face problems in managing waste and increasing its quantities. As a result, energy-related bets is of a paramount importance that revolve mainly around reducing the bill of electricity and gas consumption as well as waste management. (EuropAid, 2015b)

After the municipality of Boumerdes joined the CES-MED project to provide clean energy for Mediterranean cities, a roadmap for energy and climate was developed until the year 2020. This project also provided direct support to the municipality in the field of technical skills and training, order to prepare a sustainable energy action plan. This allows local authorities to take concrete steps aimed Mainly to greater control of energy and reduction of carbon dioxide emissions. As well as The CES-MED program organized technical workshops with local authorities and actors on the ground from economic partners, associations and universities that extended from December 2014 to December 2015, which allows identifying the basic stages that lead to reaching the objectives of the CES-MED project. This latter revolved mainly revolved around facing obstacles associated with transportation, and how to involving the parties operating in the field of tourism in the strategic plan for energy in the Municipal People's Assembly. (EuropAid, 2015b)

6.2.2. CES-MED project in the municipality of Batna:

Desiring that of the municipality of Batna can prepare a joint strategy in consultation between local elected representatives and other relevant partners. Also, under the supervision of the APRUE Agency, that seeks to activate the energy efficiency policy at the local level, it was necessary to develop measures to reduce energy consumption and integrate renewable energies into the local development plan.

This is provided by the Sustainable Energy Action Plan SEAP. This one is fundamental to the implementation of this strategy by the municipality, and which requires the strong participation of local elected representatives in all phases of the CES-MED project in order to manage operations and ensure consistency with the general policy of the municipality. The latter is preceded by media sensitization and traineeship for those in charge of local groups with the content of the national energy efficiency policy. Accordingly, the priority objectives of the municipality of Batna through the embodiment of its action plan for sustainable energy are about alleviation the burden of the municipal budget by reducing the energy bill for public lighting for local community structures such as mosques,

schools and municipal administrations. As a result, making Batna city a model for a sustainable city in Algeria by exploiting all the characteristics of the city. (EuropAid, 2015a)

6.2.3. CES-MED project in the municipality of Sidi Bel-Abbes:

In line with the CES-MED project, the Municipal representative's Assembly in Sidi Bel-Abbes is working to include the issue of combating climate change in its list of priorities. The Assembly aims also to identify new models in the fields of energy consumption and production. For this purpose, the Energy Efficiency for Mediterranean Cities project organized four technical workshops with local authorities and relevant partners in the region at the economic and university participatory level. These workshops were organized between December 2014 and June 2015, allowed identifying the stages needed to achieve several goals, which is the integration of energy efficiency development and renewable energies into the municipality's sustainable development plan, such as job creation and local market development. (EuropAid, 2015c; Perroy et al., 2018)

6.3. The international conference on accelerating the energy transition in the Mediterranean:

In addition to the daily tasks performed by the National Agency for the Promotion and Rationalization of Energy, APRUE, it also organizes and participates in conferences and seminars related to the topic of energy efficiency, whether national or international. Whereas, through APRUE agency, Algiers hosted the fourth MEDENER international conference of the Association of National Agencies to rationalize the use of energy in the Mediterranean on May 25, 2016, which focused on the energy transition in the Mediterranean region and under the slogan “towards a new sustainable energy mix”. The purpose of conference was to discuss the problematic about What is the status of energy efficiency, renewable energies and gas (econostrum.info, 2016).

At this Conference, MEDENER reaffirmed the willingness of the Association to participate in the activities of the Euro-Mediterranean Platform on Renewable Energy Sources and Energy Efficiency PRESEE, in close collaboration with all other stakeholders who have so far confirmed their readiness to do so (econostrum.info, 2016).

The participants in this international conference were seven international institutions and organizations, namely: MEDENER, UE, Inagas, Eurogas, Energy Efficiency in the Construction Sector in the Mediterranean MED-ENEC, RES4MED, OME, OXXO, Condor, GE). In

addition, three participated Algerian industrial enterprises (OXXO, Condor, GE Algérie), affirmed their commitment to the importance of regional cooperation in the field of energy to ensure safe, accessible and sustainable energy. This is the basis for stability and prosperity in the Mediterranean (MEDENER & APRUE, 2016a).

Thus, the conference concluded by emphasizing the role of local authorities in the energy transition process, and their close cooperation with energy agencies such as APRUE to meet their concrete needs related to strategic and technical support, as well as experience and exchange of good approaches at the regional level. Also, it affirmed the need for greater coordination of assistance projects regional technology to benefit from the results, and establish an enabling environment for the growth of investment in energy transition (MEDENER & APRUE, 2016b).

6.4. The conference on energy efficiency in the local collectivities:

In order to activate the national strategy for energy efficiency at the level of local authorities, APRUE organized a national conference on Thursday, March 15th, 2018 on “Energy Efficiency in the local collectivities”, which was jointly framed by the Ministry of Energy and the Ministry of Interior (interieur.gov.dz, 2018). This conference aimed to present the approach followed by the Ministry of the Interior and its endeavors through local authorities for the benefit of energy efficiency and renewable energies in the context of sustainable development of municipalities, by presenting the experience of the three Algerian municipalities that participated in the European Program on Sustainable Energy in Cities of the Southern Mediterranean CES- MED (MAKDISSI, 2016). The conference also aimed to create a model through the combination of a proven and recognized Maghreb experiences in the field of energy and environmental planning, which are added to the energy efficiency action plans and their actual implementation, so as to show the beneficial effects of this type of actions targeting development Localization in the field of sustainable energies (BOULAKHRAS, 2018; SONELGAZ, 2018).

The conference addressed the territorial promotion of renewable energies and energy efficiency as development opportunities for local collectivities. They also contested the main energy issues at the level of local communities, for which they lead to challenges in the energy transition. Among these issues, electricity bills borne by local budgets, whereas it turns out that an annual average of 5% of the municipality's operating budget, corresponds to an amount of 27 billion dinars. The annual

bill for public lighting represents 56% equivalent 14.9 billion dinars, of which 3.3 billion are unpaid debts. The deficit of municipal budgets, as well as other technical and personnel constraints overload local authorities, which forces public institutions such as APRUE to strengthen their role in favor of the municipality. It became capable of alleviating the financial charges and realizing investment opportunities through an exemplary effect in the field of renewable energies (NAHLA, 2018; Yassaa, 2018).

The participating public authorities, which brought together more than 350 participants representing Walis, mayors, national and international institutions, have clearly stated that this conference should be considered as the launch of the implementation of a roadmap and a process to enable local authorities to better understand the issue of energy efficiency at the local level. For this purpose, it is necessary to recommend the following: (APRUE, 2018)

- Continue awareness-raising efforts targeting local authorities, across the entire national territory, by organizing regional days to better explain the issues and challenges related to energy efficiency at the local level;
- Continue the survey launched by the Ministry of the Interior with local authorities in order to establish an exhaustive inventory of the municipality's properties, in particular, schools, mosques and administrative blocks. To this end, it is necessary to design and set up a database for the processing of this data, with a view to sizing energy efficiency projects and their monitoring;
- Establish a training and capacity reinforcement program for project managers, as well as human resources in order to teach them the basics necessary for efficient energy management;
- vulgarize and explain the methodology for developing energy efficiency and sustainable energy action plans at the local level and provide them with the necessary tools for this purpose, such as methodological guides;
- Promote local energy service companies in order to ensure better support, in particular, for the maintenance of public lighting networks, the installation of solar and photovoltaic water heaters, and the conversion of vehicles to LPGc;
- Promote and give priority to projects contributing to the creation of a sustainable energy efficiency market, such as the manufacture of thermal insulation in buildings in particular cork, rock wool, glass wool, solar water heaters and photovoltaic panels;

- Intensify exchanges of experience in energy efficiency and sustainable development between Algerian cities and their pairs within the framework of twinning;
- Reserve “energy info” spaces at municipal headquarters for sensitization raising and communication on energy efficiency and to regularly inform citizens of any action taken in this area;

7. Conclusion:

Through addressing the activity of the National Agency for the Promotion and Rationalization of Energy Use APRUE, it is clear that this public institution has a major role to play on two levels; one is international and the second is local. Internationally, the agency’s role at the international level is to identify and participate in international programs and agreements that are concerned with the field of energy, in line with the state’s general policy. Therefore, it is not possible to deny the importance of the role that this agency plays or what it might play in the future. However, the absence of an actual evaluation of the agency's activity is what makes it difficult to determine how and to what extent APRUE benefits from international cooperation in a vital field such as energy. As a result, this leads to a lack of distinction between Curricula and projects that actually raise the capabilities and performance of local communities. As well as upgrading mechanisms and improving policies that would achieve development at the local level.

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