Analytical Review of the Renewable Energies financing framework in Algeria - National funds and financial schemes-

عرض تحليلي لإطار تمويل الطاقات المتجددة في الجزائر - الصناديق الوطنية و المخططات المالية -

تاريخ الأرسال: 22/05/2017 تاريخ القبول: 01/07/2017

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Abstract: We look with this paper to give a review for the regulatory Framework of renewable energies in Algeria on term of financial schemes, which governs the promotion and the development of the renewable energies. Considering that, the renewable energies as a part of power sector in Algeria, needs some characteristics parameters, policies and measurement, as well as financing schemes, to attempt its development and trends. However, the height degree of the public monopoly for the energy sector in Algeria requires a focused research in the public funds for renewable energies. As a principal financial resource to promote the renewable energies development in Algeria. In light of this view, this paper is organized firstly, by giving an over review of the national funds for the renewable energies in Algeria, through its timeline from the establishment in 1999 to the date of this paper. Secondly, we look to analyze the financial schemes adopted in Algeria for the renewable energies, through milestones for the regulatory framework of the renewable energies.

Keywords: Renewable Energies, Financial Schemes, National Funds for Renewable Energies, Feed in Tariffs, The Certificate of Guaranteed Origin, The Tender Scheme.

الملخص: نسعى من خلال هذه الورقة إلى اعطاء مراجعة للإطار التنظيمي للطاقات المتجددة في الجزائر على أساس المخططات المالية التي تنظم تعزيز وتطوير الطاقات المتجددة. اخذا بعين الاعتبار أن الطاقات المتجددة كجزء من قطاع الطاقة في الجزائر، تحتاج إلى بعض الخصائص والسياسات والقياسات، فضلا عن خطط التمويل، لمحاولة تطوير ها وتحقيق اتجاهاته! ومع ذلك، فإن ارتفاع درجة الاحتكار العام لقطاع الطاقة في الجزائر يتطلب إجراء بحوث مركزة في الصناديق العامة للطاقات المتجددة في الجزائر. وفي ضوء هذا الرأي، يتم تنظيم هذه الورقة أو لا، من خلال إعطاء استعراض للصناديق الوطنية الطاقات المتجددة في الجزائر، من خلال الجدول الزمني لها منذ إنشاء في عام 1999 حتى تاريخ هذه الورقة. ثانيا، نتطلع إلى تحليل المخططات المالية المعتمدة في الجزائر للطاقات المتجددة، من خلال معالم الاطار التنظيمي للطاقات المتجددة.

الكُلمات المفتاحية: الطاقات المتجددة، الخططات المالية، الصناديق الوطنية للطاقات المتجددة، التغذية في التعريفة، شهادة المنشأ المضمون، نظام المناقصة.

Introduction:

Due to the high dependency of Algerian economy on the hydrocarbons' revenues, caused partially by the critical developments in the energy sector in general. Likewise, the rising of the domestic energy consumption and falling natural gas exports decrease the revenues available to the government, to promote its development.

On the other hand, the huge renewable energy potential unexplored, could sustainably solve the problem for the revenues decrease, in face of ever-rising domestic consumption, remains untapped. However, there are some study indicated that there are numerous challenges that need to be addressed to support the development of renewable energies in Algeria. Moreover, the Access to financing is complicated, and the tendering process is not fully organized yet. These challenges lead to project cancellations and delays and make renewable energy investment less attractive for external capital. With this in mind, let's look at the Algerian funds and financial schemes designed to the development of the renewable energies through its timeline, to attempt a general view of the Algerian strategy in term of renewable energy financing.

1. The financial schemes milestones of the renewable energies in Algeria.

The law generally gives the policy objectives, however in the framework of the renewable energy development, some policies and measurement, need for more details terms of measurements and schemes, especially in the financial terms.

Algeria has established a regulatory framework consisted generally with financial schemes to promote the development of the renewable energies.

1.1 The Feed-In Tariffs (FiTs):

Algeria is probably Africa's Fit pioneer. It became the first country in the region to introduce FiTs in March 2004, and later updating the FiTs in 2014 as principal financial scheme to promote renewable energies in Algeria.

Considered as a financial scheme established to speed up the adoption of renewable energy sources, The Feed-In Tariffs (FiTs), can be defined as Tariff-based incentives that result in favorable tariff

payments to the entity providing electricity. While that the electricity price is generally designed to promote investments in renewable energy, by guaranteeing investors a revenue stream that covers costs and a return on capital sufficient to motivate investment.

Furthermore, The Fit can be uniform or differential across technologies for a fixed period, and the feed-in tariff purchase prices are usually based on the cost of renewable energy generation paired with considerations as to social cost, investor requirements and policy targets. With a Fit, any customer or entity is normally eligible to sell energy under the terms of the tariffs.

When adopted in 2004, the Algerian FIT has Unfavorable features leading to higher transaction costs as increasing uncertainty, which make unlikely investment climate for the renewable energies.¹

The FIT published in 2004 is not based on cost of generation, but bonuses or premium prices (see Table 1).

Renewable energy Premium on the	market price
Wind power	300%
Hydro power	100%
Cogénération	160%
Waste incinération	200%
Solar electricity entirely produced by solar irradia (PV or CSP without co-generation).	ation 300%
For solar thermal electricity with gas co-gener	ation the bonuses are.
for a solar contribution greater than 25%	200%
for a solar contribution of 20% to 25%	180%
for a solar contribution of 15% to 20%	160%
for a solar contribution of 10% to 15%	140%
for a solar contribution of 5% to 10%	100%
for a solar contribution of 0% to 5%	0%
Source: M Meyer-Renschhausen: Evaluation of a countries, Journal of Energy in Southern Afric February. 2013, p56-66.	

¹ M Meyer-Renschhausen: Evaluation of feed-in tariff-schemes in African countries, Journal of Energy in Southern Africa, Vol 24 No 1, Cape Town, February. 2013, p56-66.

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Generally, the regulatory framework of the feed-in tariffs scheme in Algeria is governed by the executive decrees and ministerial orders as below:

- The Algerian government established a FIT scheme by the executive decree, No.04-92 of March 2004,² after power shortages and rationing of electricity in mid-2003. The target of the decree is diversification of electricity generation by using renewable energies and cogeneration.
- The Ministerial Order dated 28 October 2012, completed The Executive Decree dated 8 December 2011, and provides that the FIT for renewables financed by 1 % tax levy on the state's oil revenues and any other resources or contribution. ³
- The Fit Application Executive Decree dated 18 June 2013 set out the administrative process and conditions for benefiting from the Fit, moreover, the decree gives a list of eligible projects based on their technical characteristics and installed power capacity.⁴
- The Ministerial Tariff Orders for solar PV and wind dated 2 February 2014 but published in the Journal Official only on 23 April 2014. on fixing the guaranteed purchase tariffs and the conditions of their application for the electricity produced from installations using the solar photovoltaic and wind. ^{5 6} The two ministerial orders have been enacted based on the Fit Application Executive Decree 2013 and provide the Fit level applicable to solar PV and wind farms installations.

² Executive decree n ° 04-92 of 14 August 2004 on the Renewable Energy Promotion in the Framework of Sustainable Development, p.8. (No. JORA: 052 of 18-09-2004). Ministry of energy Algeria. http://www.energy.gov.dz/ accessed December 2016.http://www.energy.gov.dz/ accessed December 2016.

³ Ministerial order dated 28 October 2012 on determining the nomenclature of income and expenditure imputable to Special Account No. 302-131, p32, (No. JORA: 22 of 25-10-2013).

⁴ Executive Decree n ° 13-218 of 18 Jun 2013 in terms of granting allowances under costs for power generation diversification, p.9. (No. JORA: 33 of 26-06-2013).

⁵ Ministerial order dated of 23 April 2014 on fixing the guaranteed purchase tariffs and the conditions of their application for the electricity produced from installations using the wind turbine, p23, (No. JORA: 23 of 23-04-2014).

⁶ Ministerial order dated of 23 April 2014 on fixing the guaranteed purchase tariffs and the conditions of their application for the electricity produced from installations using the solar photovoltaic, p25, (No. JORA: 23 of 23-04-2014).

Algeria's new feed-in tariff scheme, introduced in February 2015, is likely to rectify many of the institutional and regulatory deficiencies for the first version FIT in 2004. For instance, the feed-in tariff for solar PV installations applicable to the renewable energy, as established on 23rd of April 2014, where Algeria adopted feed-in tariff scheme for the financing the solar PV installations. The goal of the program is to support Algeria in achieving its renewable energy capacity targets.

Moreover, the tariff is differentiated for the size of the plant, And The payments are divided into two phases. The tariff level for the Phase one is set flat. And The payments in the Phase two are determined by the number of equivalent hours of annual operation. However, only plants with a capacity equivalent or larger than 1 MW can benefit from the FIT program. The feedin tariff phases are presented in table 2.

hours Feed-in tariff levels in DZD/kWh per plant size Phases 1 MW - 5 MW > 5 MW Phase I 15.94/kWh (\$202/MWh) 12.75/kWh (\$ 162/MWh) 1275-1349 20.08/kWh (\$255/MWh) 16.06/kWh (\$204/MWh) 1350-1424 18.83/kWh (\$239/MWh) 15.06/kWh (\$191/MWh) 1425-1499 17.45/kWh (\$222/MWh) 13.96/kWh (\$177/MWh) Phase 1500-1574 15.94/kWh (\$202/MWh) 12.75/kWh (\$162/MWh) II 1575-1649 14.43/kWh (\$183/MWh) 11.54/kWh (\$147/MWh) 1575-1649 13.06/kWh (\$166/MWh) 10.44/kWh (\$133/MWh) 11.80/kWh (\$150/MWh) 9.44/kWh (\$120/MWh) ≥1725

Table 2: The feed-in tariff phases in Algeria.

Source: The International Energy Agency. http://www.iea.org. Accessed on October 2017.

Algeria's new feed-in tariff scheme, created on 23rd of April 2014 and introduced in February 2015, is likely to rectify many of the institutional and regulatory deficiencies. Another key thing to remember, that with the introduction of consumers into the cost management of RE subsidies, consumer protection is diminishing as a significant political barrier to a fair and effective Fit scheme.

1.1 the certificate of guaranteed origin (CGO).

The certificate of guaranteed origin is a pre-condition to benefit from the Fit under the power purchase agreements (PPA), it was published on 2015 and classified as financing scheme for renewable energy in Algeria. ⁷

The Executive Decree for the certificate of guaranteed origin was published on 18 February 2015 and provides key information for the independent power producers (IPP). Moreover, giving out both the administrative modalities for the application, instruction and granting a certificate, and the devices and inspection requirements to be borne by the IPP. The certificate of guaranteed origin can be modified, suspended and withdrawn by the Electricity and Gas Regulatory Commission (CREG). As the certificate of guaranteed origin shall not be published, it shall not be challenged before the administrative court by a third-party.⁸

The certificate of guaranteed origin is a key permit in renewable project development as it constitutes one of the first authorizations to be obtained in order to apply for the PPA to be implemented with existing FiTs.

1.2 The power purchase agreement (PPA).

As a part of the context of financing schemes of renewable energies, we can take the concept of PPA as a system providing the potential solution to these cost challenges, as well as a model in which a third-party owner uses a power purchase agreement (PPA) to finance an on-site PV Solar system. As well as allows a developer to build and own a PV solar system on the customer's property and sell the power back to the customer.

In addition, the third-party PPA model enables the customer to support solar power while avoiding most or all initial costs as well as responsibilities for operations and maintenance, both of which typically transfer to the developer. these advantages appeal to owners of

 $^{^7}$ Executive Decree n $^\circ$ 15-69 of 11 Feb 2015 on laying down the procedures for the certification of the origin of the renewable energy, p.9. (No. JORA: 09 of 18-02-2015).

⁸ the Electricity and Gas Regulatory Commission (CREG).www.creg.gov.dz. accessed October 2017.

residential and commercial buildings who would like to obtain solar PV systems.

The PPA scheme in Algeria will be executed for 20 years as from the commissioning date of the plant. However, this initial 20-year term can be reduced if the commissioning date of the plant occurs more than six months after the expected commissioning date indicated in the PPA, as a result of the independent power producers (IPP) action or inaction. The PPA duration should be then reduced proportionally to the delay.⁹

The independent power producers (IPP), was regulated by the executive decrees, as below:

- Executive Decree 06-429 dated 26 November 2006: Governs the rules applicable to IPPs benefiting from an Operating Authorization.
- Executive Decree 06-428 dated 26 November 2006: Governs the rules applicable to IPPs benefiting from the special regime.
- Executive Decree 13-218 dated 18 June 2013: Governs the tariffs and the power purchase agreements with an IPP.

The PPA scheme is generally animated under the PPP framework of the country, as well as governed by a regulatory framework (executive decrees, ministerial orders, and instructions). For instance, In the case of Algeria, the public-private partnerships (PPP), are governed by Law and other applicable texts as below: ¹⁰

- Presidential Decree No. 15-247 dated September 16, 2015, on the regulation of public contracts and public service delegations.
- Law No. 99-09 of 28 July 1999 on the energy management.
- Law No. 02-01 of 5 February 2002 on electricity and public distribution of gas by pipelines.
- Law No. 04-09 of 14 August 2004 on the promotion of renewable energy in the context of sustainable development.

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⁹ Idem.

¹⁰ The PPPIRC public-private-partnership in infrastructure resource center. Available online pdf: https://ppp.worldbank.org/public-private-partnership/. Accessed October 2017.

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- Executive Decree No. 13-424 of 18 December 2013: amending and supplementing Executive Decree No. 05-495 of 26 December 2005 on the energy audit of energy intensive institutions.
- Ministerial Orders of 2 February 2014: fixing the feed-in tariffs for electricity production from plants using photovoltaics and conditions for their application.¹¹
- Ministerial Orders of 2 February 2014: fixing the feed-in tariffs for electricity production from plants using wind power and the condition. ¹²

1.3 The tendering scheme for renewable energies in Algeria:

As a new financial scheme to enhance renewable energy investments. Governs with the Executive Decree No. 17-98 of 26 February 2017, which defines the tendering procedure for the production of renewable or cogenerated energies and their integration in the national system of electricity supply. Generally, the executive decree 17-98 governs the rules applicable to the launch of calls for tenders for renewable energy projects. ¹³

After the implementation of the executive decree in February 2017, The Algerian government is set to launch a tender for the construction of large-scale PV projects totaling 4 GW. The tender will be held in three 1,350 MW phases and will select projects with an average capacity of 100 MW.

The Projects selected in the tender will be owned and developed by special purpose companies, which will be responsible for financing, EPC works, grid-connection and the sale of power. These vehicles will be owned 51% by a domestic investor and 49% by an international partner. Government-owned Sonatrach will hold a 40% stake in all of

¹² Ministerial order dated of 02 February 2014 on fixing the guaranteed purchase tariffs and the conditions of their application for the electricity produced from installations using the wind power, p25, (No. JORA: 23 of 23-04-2014).

¹¹ Ministerial order dated of 02 February 2014 on fixing the guaranteed purchase tariffs and the conditions of their application for the electricity produced from installations using the solar photovoltaic, p25, (No. JORA: 23 of 23-04-2014).

¹³ Executive Decree n ° 17-98 of 02 February 2017 on defining the tendering procedure for the production of renewable energies or cogeneration and their integration into the national system supply of electrical energy, p.3. (No. JORA: 15 of 05-03-2017).

these companies, while Sonelgaz and other public or private Algerian companies will hold the remaining 11%. For Algerian private investors the participation in the capital of each company will not exceed 6%. Financing for each project must be provided 30% with own funds and 70% with bank loans. 14

Furthermore, an appeared problem for tendering scheme in Algeria is that the details and policies are always delayed. details, has never been published. According to local press agency APS. the newly appointed minister of environment and renewable energy Fatma Zohra Zerouat has now revealed that an ad hoc committee for the tender will be created, and that its final review will be published together with her new action plan for the development of renewable energies, without providing a specific time frame. ¹⁵

2 funds of the Renewable Energies in Algeria.

Algeria has been paving the way for renewable energy projects by establishing a public finance enhancement, through special funds to developing the energy management as well as the diversification of its energy sector to renewable energies. Especially with the public monopolistic in the energy sector investments.

From 1999 to the date of this study Algeria has created and merged through laws and executive decrees special funds, to financing renewable energies development and promotion, and giving a budget structure of the special accounts for those funds in term of financing resources and expenditure.

The main funds established by the Algerian government to finance the renewable energies development, can be given through its timeline as below:

- National Fund for Energy Management (NFEM) in 1999.
- national fund for Renewable Energies (NFRE) in 2009.
- National Fund for renewable energies and cogeneration (NFREC) in 2011.

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¹⁴ Algerian renewable energy sector raises doubts on 4 GW solar tender: from Pv magazine. https://www.pv-magazine.com/accessed October 2017.

¹⁵ APS: the Algerian press service. http://www.aps.dz /accessed on October 2017.

- National fund for the energy efficiency and for the renewable energies and cogeneration (NFEEREC) in 2016. 16

2.1 National Fund for Energy Management (NFEM):

The NFEM fund was established by the law on energy management enacted in 1999, provides for the creation of a National Fund for Energy Management (NFEM) which helps to finance renewable energy projects. preparing to the implementation of the law on electricity and public distribution of gas by pipeline passed in 2002.

2.2 National fund for Renewable Energies (NFRE):

The NFRE was established under the Law n° 09-09 dated 30th, December 2009, relating to the Finance law for 2010, in particular Article 63 creating the national fund for Renewable Energies, which the establishment of a Special Assignment Account No. 302-131 entitled "National Fund for Renewable Energies" opened in the Treasury.¹⁷
The records of the special account No. 302-131 for the NFRE was

The records of the special account No. 302-131 for the NFRE was detailed as below: 18

- In the recipes: 0.5% of the petroleum revenues and any other resources or contributions.
- In the expenses: the contribution to the financing of operations and projects within the framework of the promotion of renewable energies. The authorizing of this account is the minister responsible for energy.

Furthermore, in the same national context to enhancing the energy efficiency and development of renewable energy, the National Energy Efficiency Program (NEEP) was implemented in 2000.¹⁹, to finance energy efficiency investments of the National Energy Efficiency Agency (APRUE) and its projects under the National Energy Efficiency Program (NEEP). the annual budget is 57 million AD. The resources of the funds include taxes per dinar on natural gas (0.00015/btu) and

¹⁶ Executive Decree n ° 16-121 of 06 Apr 2016 on the modalities for the operation of the special account No. 302-131 entitled "National fund for the saving energy and for the renewable energies and cogeneration", p.7. (No. JORA: 22 of 06-04-2016).

 $^{^{17}}$ Law n $^{\circ}$ 09-09 of 30 Dec 2009 on the Finance law for 2010, p.21. (No. JORA: 08 of 14-12-2011).

¹⁸ Idem.

¹⁹ Executive Decree no. 2000-116. From https://www.reeep.org/algeria-2012. accessed October 2017.

electricity (0.02/kWh), as well as an initial government contribution of 100 million Algerian dinars (1.15 million dollars). and Additional resources which may include taxes on energy-intensive equipment, penalties, loan repayments, government, and other contributions. ²⁰

2.3 National Fund for renewable energies and cogeneration (NFREC):

Established by the Law No. 11-11 of 18 July 2011 on the Supplementary Finance Law for 2011, particularly, Article 40, which amending Article 63 of law 09-09.

The records of the Account No. 302-131 entitled "National Fund for Renewable Energies and cogeneration" have changed below: ²¹

- In recipes: 1% of the oil revenues.
- In the expenses: The contribution to the financing of actions and projects in the framework of the promotion of Renewable energy and cogeneration.

Moreover, after the establishment of the National Fund for renewable energies and cogeneration (NFREC), Algeria has implemented a regulatory framework to give landmarks and policies of the management of this fund, through executive decrees and ministerial orders, as below:

- Executive Decree No. 11-423 dated 08th, December 2011, that sets terms and conditions for the running of earmarked account No. 302-131 with the title "National Funds for renewable energies and cogeneration". ²² Amends the operating procedures of the National Fund for Renewable Energy and Cogeneration, first established pursuant to the Finance Act of 2010, to increase the revenue paid into this fund from 0.5% of petroleum revenues to 1% of petroleum revenues, plus any additional contributions. Grants authority to the Minister of Finance to jointly manage expenditures from this fund with the Minister of Energy for the purposes of financing operations

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 $^{^{20}}$ Law n $^{\circ}$ 11-11 of 30 Dec 2011 on the Supplementary Finance Law for 2011, p.11-12. (No. JORA: 78 of 31-12-2009).

²¹ Idem.

²² Executive Decree n ° 11-423 of 08 Dec 2011 on terms and conditions for the running of earmarked account No.302-131, p.18. (No. JORA: 068 of 14-12-2011),

and projects for the promotion of renewable energy and cogeneration.

- The Ministerial Order dated 28 October 2012, on Setting out the modalities for the monitoring and evaluation of appropriation account No. 302-131 entitled "National Fund for Renewable Energy and Cogeneration". ²³
- Ministerial order dated 28 October 2012, determining the nomenclature of income and expenditure imputable to Special Account No. 302-131 entitled "National Fund for Renewable Energies and Cogeneration.²⁴
- The Ministerial Order dated 28 October 2012, completed The Executive Decree dated 8 December 2011, and provides that the Feed-In Tariffs for renewables financed by:
- 1% tax levy on the state's oil revenues.
- Any other resources or contribution.

2.4 National fund for the energy efficiency and for the renewable energies and cogeneration (NFEEREC):

The (NFEEREC), was firstly established by the Law No. 14-10 of 30 December 2014 wearing the Finance law for 2015. As well as provides in the Article 108, for the merger of the two Special Funds, first, The National Fund for Energy saving and second the National Fund for Renewable Energy and cogeneration. And next implemented with the Executive Decree No. 16-121 of 6 April 2016 "amended and completed". ²⁵

Furthermore, the executive decree No. 16-121 determines the modalities for the operation of the special account No. 302-131 entitled "National fund for the energy efficiency and for the renewable energies and cogeneration".

²³ Ministerial order dated 28 October 2012 on Setting out the modalities for the monitoring and evaluation of appropriation account No. 302-131, p33, (No. JORA: 22 of 25-10-2013).

²⁴ Ministerial order dated 28 October 2012 on determining the nomenclature of income and expenditure imputable to Special Account No. 302-131, p32, (No. JORA: 22 of 25-10-2013).

 $^{^{25}}$ Decree n $^{\circ}$ 16-121 of 06 Apr 2016 on the modalities for the operation of the special account No. 302-131 entitled "National fund for the saving energy and for the renewable energies and cogeneration", p.7. (No. JORA: 22 of 06-04-2016).

The records of the Account No. 302-131 affected to the fund, traces some changes in this decree Can be explained as follows:²⁶

• In recipes: Line 1: "Renewable energies and cogeneration": 1% of the oil revenues and all other taxes fixed by the legislation, and any other resources or contributions.

Line 2: "Energy Control": State subsidies; the product of the national consumption tax on energy; Product taxes on high energy consuming devices; the fines provided under the law the mastery of Energy; the unpaid loan repayment product made under the mastery of energy; any other resources or contributions.

• Expenditure: Line 1: "Renewable energies and cogeneration": allocations for the financing of actions and projects included in the promotion of renewable energies and cogeneration; the allocations for the pre-financing interred in the promotion of renewable energies and cogeneration. Line 2: Energy control: financing of actions and projects included in the program for energy saving; the granting of unpaid loans made to holder's energy efficiency investments and non-enrolled in the program for the energy saving; providing guarantees for borrowing nearby banks or financial institutions; the allocations for the pre-financing of the acquisition of related apparatus and equipment energy efficiency

Conclusion:

Algeria's new feed-in tariff scheme, established on 23rd of April 2014 and implemented in February 2015, is likely to rectify many of the institutional and regulatory deficiencies. With the remodeled scheme the country is able to combine a more effective cost-distribution regime with regulatory framework tighter to provide investors and developers with greater security.

Moreover, the Access to financing is not easy and the tendering process is not transparent. These challenges lead to project cancellations and delays and make renewable energy investment less attractive for the big international capitals presented today to financing the renewable energies projects.

²⁶ Idem.

The tendering scheme is designed to be the new financial scheme to promote the renewable energy investments in Algeria. Were Algerian government expecting reference price of \$0.04/kWh for 4 GW solar tender.

In light of this view; we can give some remarks and recommendations in conclusion of this paper as below:

- The size of tenders lots established on 26 February 2017,(1.35 GW), was too big to guarantee equal access to all market, and could lead to having a single winner with a project covering all the allocated capacity in each phase, thus eliminating every chance of diversifying the market.
- the new tendering scheme solved most of the issues created by the unapplied FIT scheme but risks discouraging the participation of small and medium-sized developers due to the risks and costs involved in tendering. This has the potential to a collusion between bidders and to drive up electricity prices.
- One of the main controversial aspects of the tender, were its rules for domestic content requirements that compels developers to construct PV component manufacturing facilities in the country. While certain taxes on foreign products could be adopted as an alternative, moreover presents a future source to finance the local Industry for the renewable energies

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- 6. Ministerial order dated of 23 April 2014 on fixing the guaranteed purchase tariffs and the conditions of their application for the electricity produced from installations using the solar photovoltaic, p25, (No. JORA: 23 of 23-04-2014).
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- 20. Ministerial order dated 28 October 2012 on Setting out the modalities for the monitoring and evaluation of appropriation account No. 302-131, p33, (No. JORA: 22 of 25-10-2013).
- 21. Ministerial order dated 28 October 2012 on determining the nomenclature of income and expenditure imputable to Special Account No. 302-131, p32, (No. JORA: 22 of 25-10-2013).
- 22. Decree n ° 16-121 of 06 Apr 2016 on the modalities for the operation of the special account No. 302-131 entitled "National fund for the saving energy and for the renewable energies and cogeneration", p.7. (No. JORA: 22 of 06-04-2016).