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**FISUEL General Information****For consistent newsletters**

Thank you to everyone who contributed to the richness of this newsletter.

As them, if you have topics that you would like to share with the recipients of the FISUEL newsletter, send us a page with photos to the e-mail address fisuel@fisuel.com

Known dates today for Fisuel meetings in 2018 and in 2019

Africa Working Group in progress and in April 2019 in Beirut

Asia & Pacific Working Group in April 2019 in Beirut

Europe & Middle East Working Group the 8th of November 2018 in Lyon and in April 2019 in Beirut

The Board meeting in February and April 2019

The Newsletter is available on website www.fisuel.org

Reminder

- The address for any letter to Fisuel : Fisuel chez Promotelec, Tour Chantecoq, 5 rue Chantecoq, 92808 Puteaux Cedex, France
- The e-mail address to Mrs Annie Besançon: fisuel@fisuel.org,
- Phone number : + 33 (0) 9 52 19 68 75
- Head office are 21 rue Ampère, Paris, 75017, France.



Words from Vice-President Mr Akio Nakamura

Electricity is the core energy when smartly used. It is easy to use, easy to transport and easily transformed into any other types of energy like light, heat and motion. Renewable energies need to be changed to electricity in order to be used variously. So, this saying is quite true. But everything has two aspects, bright and dark. Electricity can be dangerous if improperly managed and used.



We must achieve two steps for the safety of electricity. The first one is to establish rational and effective mechanism to maintain safety. It includes wide area such as standards of electrical appliances, regulations on wiring works, certifying system of technicians, inspection rules and so on.

The second step, this is essential, is to make the mechanism work in the real world. Though satisfying mechanism can be mostly made by a kind of desk work, the second step requires a great deal of labour and is much harder to accomplish. You can easily understand the difficulties of the second step when you think about the problems of fake or dangerous products. The proliferation of fake and dangerous products can't be reduced only by making laws and regulations that prohibit their use. A lot of solid action like market surveillance and on-the-spot inspection is necessary. Furthermore, the promotion of the recognition of manufacturers and users that the use of fake or dangerous products is wrong and immoral is also included in the second step.

From my professional experience of fifty years in power industry, I am quite sure that high level of electrical safety can't be attained without the effort to go through the second step that demands a lot of persistent endeavour. Persistence is always necessary for success.

Mr Akio Nakamura Vice-President of FISUEL

FEEDS Report

The Working Group Europe Middle East (GT Eu/Me) has invested a lot in 2018 on the FEEDS program, (Forum for European Electrical Domestic Safety).

FISUEL is one of the co-sponsors with European Copper Institute, (ECI). The work has allowed creating multi-entry tables for all European countries. (Number of inhabitants, dwellings, fires, those of electric sources ...). Here is the example of the global table "Europe" being validated.

| Country | Date of review | # population | # dwellings | BNP (% of EU-28) | # residential fires | |
|---------|----------------|--------------------------------|--------------------------------|-----------------------------------|--|-----------------------|
| | | | | | Fires reported | Total number of fires |
| EU | 2018 | 512 762 685 | 226 991 424 | 100 | 437 420 | 1 087 210 |
| | | # electrical residential fires | | % of fires from electrical origin | # fire accidents (all residential fires) | |
| | | Electric fires reported | Total number of electric fires | % | Fatalities | Injuries |
| | | 108 810 | 272 960 | 25 | 4 040 | 133 428 |

Specimen – being validated

All tables will be published in the next Fisuel newsletters.

Mr Benoit Dôme

Diakelec – Guinée Conakry

Diakelec from Guinea Conakry was approved as membership of FISUEL, by the Board of Directors on Monday, October 15 in Paris, on September 1, 2018.



Algassimou DIAKITE
CEO of DIAKELEC HOME



A major player in the distribution of electrical equipment, DIAKELEC has been operating since 2009 in the GUINEA market. The acquired integration of business skills and systems alongside market leaders allows DIAKELEC to position itself as a powerful and strategic partner in the electrical equipment distribution sector while having a strong development potential due to the increasing applications of electrical equipment, the evolution of product technology and the need for new services.

With a know-how covering all the activities of the distribution, DIAKELEC accompanies its customers in its projects to build together a unique competitive advantage, to anticipate the improvement of the standards concerning the distribution of the products, and to increase the quality of the commercial service.

To satisfy a large number of customers and meet their needs, we offer a multitude of varied services including:

INSTALLATION

Before the actual installation work, our electricians carry out a complete diagnosis to determine the real needs of the customer.

HELP

Our company is a structure that also offers a quick troubleshooting service to solve problems of various kinds that may face individuals and professionals.

ELECTRICAL MAINTENANCE

Maintenance is a vaccine for your electrical installations, given the number of accidents of electrical origin, we also ensure the maintenance of your facilities in order to reduce accidents related to electric current.

STUDY

As part of a new construction or renovation, the electrical installation is one of the longest and most complex finishing works. In order not to get tangled with the brushes during the works, it is strongly recommended to establish a circuit diagram from the beginning to know all the details of the installation and its components. Whether you are an individual or a professional, we accompany you in the development of your quote also.

ADVICE

Diakelec offers a service such as compliance of electrical devices. There are indeed standards that must comply with all electrical installations. This service is therefore proposed to detect and resolve anomalies. We make the necessary recommendations to enable our customers to obtain better and safer materials.

TRAINING

Each year, Diakelec trains more than 150 electricians in partnership with Legrand, one of the world leaders in products and systems for electrical installations and information networks or with Nexans, a worldwide expert in the cable industry. The company Diakelec actively engages in a good development of Guinea, aware that every year a lot of fatal accidents that occur, are related to the use of electrical equipment of bad qualities.

Mr Algassimou Diakité

Covelec – Guinée Conakry

Covelec from Guinea Conakry was approved as membership of FISUEL, by the Board of Directors on Monday, October 15 in Paris, on September 1, 2018.



The company **COVELEC** is a limited company with limited responsibilities, created in 2009 by **Mr Kallo Aboubacar Sidiki & Frère** who also ensures its management and management.

Our company, located in the capital Conakry, whose head office is in the municipality of Dixinn, offers you its skills and know-how for more than 9 years.

It has a share capital of 10,000,000 GNF and owns funds that can help ensure its sustainability. **Experience and know-how** This durability is a guarantee of major know-how for the company; it contributes greatly to its mastery of **General Electricity, Automation, Fire Alarm, Intercom, Access Control and Computer / Network Cabling**. This know-how,

accumulated during these many years of experience, allows our company to associate proven methods of renovation and current techniques but also to treat indifferently old or modern materials.

Human relations

This relationship is based on the notions of loyalty and stability; they apply equally to **COVELEC** employees as well as to its customers, some of whom have been loyal to it since the company's creation (public and private companies, individuals, institutions, co-owners, property managers, architects and decorators ...)

Since 2013 when it was transformed into **COVELEC SARL**, it carries out maintenance and cleaning of all your electrical installations.

The Company advised by various control bodies, **ENERGETIC**, but still builders, **COVELEC SARL** will ensure the longevity of your electrical installation through its compliance staff.

COVELEC specialist in **high voltage maintenance intervenes** on all brands of equipment.

COVELEC is also involved in your **Low Voltage installations**, transformers, circuit breakers.

COVELEC carries out your **dielectric analyzes** and advises you on the results and work to be done.

COVELEC surrounds itself with qualified partners to offer you complementary services (thermography, generators, electric motors ...)

HT-BT cells: Suction, spraying, greasing of the mechanisms, verification of the tightness of the connections and the good functioning and the triggers.

COVELEC also maintains Transformers:

- Suction, spraying, level control, safety test.
- Replacement of oil circuit breakers HT
- Complete review of the distribution cells
- Cleaning of inverters and electrical cabinets
- Depollution or destruction of transformers
- Supply (s) of HT / LV cell, transformers
- Infrared Thermography: thermal control of installations.

COVELEC SARL, your partner in the energy chain.

Mr Kallo Aboubacar Sidiki



Aboubacar Sidiki KALLO
CEO of COVELEC

Visit of Kesco at Promotelec

Visit of Kesco at Promotelec, Friday, November 9, 2018.

The aim was the introduction of the two bodies (Kesco and FISUEL) following the arrival of the new CEO of Kesco. The topics discussed, in connection with those of Fisuel, were the promotion of the safety of users of electricity, the problems encountered and the good practices, in the 2 countries France and South Korea.

Kesco, which has an office in Vietnam, will try to develop Fisuel in South East Asia. The KESCO delegation included : CEO and President Mr Sung-Wan Cho, Chairman of Inspection Division Mr Duk-Ki Choi, General Manager of Planning and Innovation Division Mr Jae-Sung Yoon, Assistant Manager of Secretary Office Mr Yoon - Jong Kim and Assistant Manager of International Cooperation Team Mr Moonyeong Bak who is also the leader of Fisuel Asia / Pacific Working Group. Fisuel was represented by its president Mr Dominique Desmoulins.



Mr Dominique Desmoulins Promotelec and President of Fisuel

M.O.U signed between Kesco and Consuel

On November 7, 2018, 2 members of FISUEL, KESCO (South Korea) and CONSUEL (France) signed a Memorandum of Understanding to improve their inspection practices for electrical installations. The signing ceremony took place at the CONSUEL Headquarters.

The signatories were Mr Sung-Wan Cho, Chairman and CEO of KESCO and Mr Jacques Wetzels, Chairman of CONSUEL. The various subjects envisaged in this exchange will deal in particular with the standard references, the methodologies of inspection, the evolution of technics in the electric field and the experiments of new inspections. During this first visit, the representatives of KESCO, Mr SUN-Wan Cho, Chairman and Chief Executive Officer (CEO), Mr Duk-Ki Choi, Director of Inspection Division, Mr Jae-Sung Yonn Director of Planning and Innovation, Mr Yoon-Jong Kim, Assistant Manager of the General Secretariat, and Mr Moonyeong Bak, Assistant Manager of the International Cooperation Team, were able to exchange with the technical department of CONSUEL and participate in a day of field visit during which the sites of photovoltaic installations and multi-housing accommodation buildings were inspected.

They also discovered in the Regional office of Gennevilliers the work of technicians and secretaries. This rich collaboration both technically and on the sharing of practices will continue in the coming months through regular exchanges using emails or conference calls.

During the year 2019, a CONSUEL delegation will visit KESCO to discover in turn all the subtleties of the system in place in South Korea.



Mr Marc Maslowski Consuel and Treasurer of Fisuel

Africa's Energy Surge – Progress of goal 7 in 2018

AIM : ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINBLE AND MODERN ENERGY FOR ALL (SDG7 – sustainable Development Goal 7).

FOR FISUEL, IT'S FUNDAMENTAL TO ENSURE ALSO THE SAFETY ASPECTS SPECIALLY FOR THE POPULATION USING ELECTRICITY FOR THE FIRST TIME.



Ensuring access to affordable, reliable and modern energy for all has come one step closer due to recent progress in electrification, particularly in LDCs (Least Developed Countries), and improvements in industrial energy efficiency. However, national priorities and policy ambitions still need to be strengthened to put the world on track to meet the energy targets for 2030.

From 2000 to 2016, the proportion of the global population with access to electricity increased from 78 per cent to 87 per cent, with the absolute number of people living without electricity dipping to just below 1 billion.

- In the least developed countries, the proportion of the people with access to electricity more than doubled between 2000 and 2016.
- In 2016, 3 billion people (41 per cent of the world's population) were still cooking with polluting fuel and stove combinations.
- The share of renewables in final energy consumption increased modestly, from 17.3 per cent in 2014 to 17.5 per cent in 2015. Yet only 55 per cent of the renewable share was derived from modern forms of renewable energy.
- Global energy intensity decreased by 2.8 per cent from 2014 to 2015, double the rate of improvement seen between 1990 and 2010.

Source: Report of the Secretary-General, [The Sustainable Development Goals Report 2018](#)

Remind:

The UN's plan for universal access to energy:

<https://www.seforall.org/content/africas-energy-surge>

Today 1.2 billion people around the world have no access to electricity, but a UN plan aims to fix that -- with clean and affordable energy -- by 2030:

<https://edition.cnn.com/videos/world/2016/12/19/africas-energy-surge-kyte-int.cnn>

Source: CNN

FISUEL recommends that the projects contain a chapter on education and information regarding electrical safety

Examples are available on the FISUEL internet site

<http://www.fisuel.org/index.php?id=5>

Mr Benoit Dôme



Report of the WG EU/ME

One of the main actions of the WG Eu / Mo in 2018 was to develop the recommendations on EPBD¹ coordinated with ECI, and AIE. This document is official, it exists only in English.



ECI, FISUEL and AIE recommendations on the EPBD guidance for Member States on Fire Safety

The European Copper Institute (ECI), the International Federation for the Safety of Electricity Users (FISUEL) and the European Electrical Contractors Association (AIE) welcome the European Commission's effort to draft a guidance document on the Energy Performance of Buildings Directive with regards to the transposition of the provisions on fire safety.

ECI, FISUEL and AIE advocate for the prevention of fires from electrical origin, since degraded electrical installations or faulty electrical appliances make up 25% of all residential fires in Europe. In this context, they would like to propose 5 recommendations to consider when drafting the guidance.

[1] Develop awareness on electrical safety

An electrical fire safety awareness campaign should be setup to improve knowledge on the risks of old electrical installations and appliances and to promote the use of qualified and skilled contractors.

Making occupants aware of the risks of old installations and appliances is one of the most efficient ways of improving electrical safety awareness among citizens, in particular in view of the fact that 'do-it-yourself' work making small modifications on the electrical installation is increasing.

More information: <https://www.nfpa.org/fpw/index.html>

[2] Encourage regular inspections

Initial inspections of new buildings and safety checks at regular intervals are paramount to prevent incidents. **Periodic inspections should take place to check the electrical installations with a limited validity, as recommended by HD 60364-6.** The inspection documents should be made available when the property changes tenant or owner.

Despite a clear recommendation by CENELEC on periodic inspection, only a minority of EU countries have a system for periodic inspection of electrical installations in place. As a result, installations continue to contain features that are considered to be unsafe according to the latest standards. The **FEEDS report** concludes that periodic inspections, verifying whether electrical safety standards are effectively applied, result in a reduction of the number of fires.

More information: FEEDS report - "**Residential electrical safety - How to ensure progress**", <http://www.leonardo-energy.org/resources/1136>

Inspections of electrical installations should be encouraged when:

- Conducting **renovation works**;
- Installing **photovoltaics, heat pumps or charging stations** for electric vehicles.

The electrical energy system is rapidly changing and new electrical devices, such as solar panels, heat pumps and electrical vehicle chargers, can introduce serious challenges to the safety of a domestic electrical system. Inspections and checks help identify these issues and improve safety.

¹ Energy Performance of Buildings Directive
FISUEL Newsletter Novembre 2018

| | |
|---|---|
| [3] Encourage Member States to support the most vulnerable households to upgrade the safety of electrical installations | |
| <p>The guidance can encourage Member States to provide funds to those most at risk of energy poverty - namely the elderly, single parents and young people – to upgrade the safety of electric installations.</p> | <p>Multiple statistical sources reveal that population segments suffering from safety poverty are the same affected by energy poverty. Demographic groups with lower living standards run more than average risk of accidents from electrical origin: by focusing their resources on covering basic needs, they are more likely to rent cheaper, older and inappropriately maintained housing with inadequate heating and obsolete electrical installations.</p> <p>More information: “Addressing safety and energy poverty to better protect vulnerable consumers”, published by Benoît Dôme in EPOV platform.</p> |
| [4] Reinforce market surveillance for electrical equipment | |
| <p>Market surveillance at EU level for electrical equipment and cables should be reinforced.</p> | <p>Considering that the uses of domestic electricity continue to diversify and develop, and taking into account that <u>20 to 30% of the total number of domestic fires</u> have an electrical origin, a reinforced market surveillance system for electrical equipment, including cables, can prevent the entry into market of hazardous products.</p> |
| [5] Invest in fully up-to-date equipment and safety service | |
| <p>The investment in, and the use of, up to date technologies for electrical protection devices should be promoted when relevant to reduce fire risks and decrease electrical incidents.</p> | <p>In the past 50 years, the use of fuses, circuit breaker, differential protection and accurate cables has shown its efficiency. Despite a large increase of electricity usage, the number of incidents and fires has decreased significantly. Depending on the practice in each country, a national approach should be promoted.</p> <p>More information: https://www.onse.fr/wp-content/uploads/2017/09/plaquette_onse_en.pdf</p> |
| About ECI, FISUEL and AIE | |
| <p>The European Copper Institute (ECI)—founded in 1996 and based in Brussels—coordinates a team of professionals based in offices across Europe and works closely with its copper industry members on regulatory matters and market development programs. ECI is part of the Copper Alliance™, which brings together the global copper industry to develop and defend markets for copper, and to make a positive contribution to society’s sustainable development goals.</p> <p>The International Federation for the Safety of Electricity Users (FISUEL) represents legal entities with operational responsibility and/or concerns for the safety of electricity users and uses. It aims to increase the level of safety in electrical installations as well as the convergence between systems of reference, by jointly promoting electrical safety at the international level, and encouraging contact and sharing of experiences between countries.</p> <p>The European Electrical Contractors Association (AIE) – founded in 1954 – represents the interests of electrical contractors in Europe, covering 1.2 million jobs, 125.500 companies and 137 billion Euro turnovers. AIE mission is to promote high-quality and safe electrical installations in Europe and to promote opportunities for electrical contractors by helping to build a regulatory environment in the EU that embraces the modern electrical contractor.</p> | |

Mr Benoit Dôme and Mr Marc Maslowski

Africa / Electricity: The safety of users is a concern...04-2018

Attached is the article written by Mr. LAWANI Babatundé, Economic Journalist / Blogger, which he sent to the President.

The security of electricity users, mainly in Africa, is of concern to the point of reflection in Côte d'Ivoire. From April 30 to May 3 was held in Abidjan, the symposium of the International Federation for the Safety of Users of Electricity (FISUEL) on the Energy Transition, state of situation, issues and perspectives for the safety of users of electricity.

It shows that in South Korea and Japan, 15% of fires are electrical, compared to 25% in Europe. Where Africa has a rate of 70 to 80%. The causes of these fires of electrical sources are various including the use of counterfeiting, aging or dangerous electrical equipment, uncontrolled installations, the lack of control of the buildings and the qualification of the personnel

« In 1981, Côte d'Ivoire entrusted the LBTP SECUREL with the initial control of indoor electrical installations. However, the periodic inspection, that is to say for premises in the operating phase is still a challenge, because several frames are subject to modifications after the initial inspection, the exhibitors and the same risks as those that we wanted to eliminate by the first control. To date, Senegal, member of the FISUEL, is very advanced in the approach for the control of the interior electrical installations », admits Jean Claude Kouassi, Director General of the Laboratory of Building and Public Works, LBTP.

Electricity plays a major role in the development of countries but can quickly become a danger. One of the sites most affected by electricity-related fires in African cities remains the markets. Since 2015, Abidjan, Bouake, Dakar, Niamey, Cotonou, Libreville, Lomé, Ouagadougou, have seen their markets ravaged by the flames. A non-exhaustive list. Côte d'Ivoire, alone counts 67 markets burned in 30 years. A dozen for the year 2017 alone.

Increased surveillance at different borders has been suggested to prevent the entry of hazardous electrical products and counterfeiting devices into the markets. And regular and periodic inspections have been recommended to reduce the electric fires in Africa as much as possible.

At this symposium, exchanges also focused on access to electricity for all. In 2016, people living in areas not yet electrified around the world increased from 1.6 billion to 1.1 billion. The promotion of renewable energies has been recommended for affordable, sustainable and affordable access to electricity for everyone, everywhere, in total safety.

« Many countries have really made progress towards almost total electrification such as South America, North Africa and the Middle East. In sub-Saharan Africa, electrification efforts continue and exceeded for the first time in 2014, the increase in population, which causes a decline in the number of people without access to electricity », said Dominique Desmoulins, President of the International Federation for the Safety of Users of Electricity, FISUEL

This meeting was attended by experts from Côte d'Ivoire, Belgium, Benin, Cameroon, Niger, Senegal, Lebanon, France, South of Korea, Indonesia, Japan, Malaysia, New Caledonia and organizations such as, UIE, Legrand and Schneider Electric, IEC and Cenelec and ECI Copperalliance, for the copper industry and Électriciens Sans Frontières, many of the members of FISUEL.

A federation, created 16 years ago, which includes 22 members from 15 countries spread over 4 continents. It aims to fight against counterfeiting and dangerous electrical products. To achieve this, it encourages local authorities and decision-makers to update their national regulations and to impose initial and periodic checks on electrical installations.

Mr LAWANI Babatundé



Fisuel GAM 2019 in Beirut in Lebanon, invited by OEA and FLE



Order des Ingenieurs et d'Architects -
Beyrouth



اتحاد المهندسين اللبنانيين
FEDERATION OF LEBANESE ENGINEERS

Theme of the GAM 2019 : « Safety Related to Renewable Energy »

The event will take place from April 29 to May 3, 2019. The hotel will be defined soon.

Note: Lebanon will host World Energy Week 2020



Project of Agenda :

SAVE THE DATES : 29th of April – 3rd of May

| 1 st day : MONDAY April 29 AVRIL – Board – Opening Ceremony - GA | |
|---|--|
| 09h - 10h | Board meeting of FISUEL |
| 14H00 – 15 H30 | WELCOME & OPENING CEREMONY : |
| | Address by the Chief of the Branch electrical engineers |
| | Address of the President of FLE & OEA: Architect Jad Tabet |
| | Address of the President of FISUEL |
| | Address of the Industry Minister |
| 15H30 – 16H00 | Visit of the Stands |
| 16H00 – 16H15 | Break |
| 16H15 – 18H15 | General Assembly of FISUEL |
| 2 nd day : THUESDAY April 30 / Symposium | |
| 08H00– 10H00 | SYMPOSIUM |
| 10H00 – 10H15 | Break |
| 10H 15 – 12H15 | SYMPOSIUM |
| 12 H 15 – 13h15 | Lunch |
| 14H00 – 16H00 | SYMPOSIUM |
| 16H00 -16H30 | Break |
| 16H30 – 17H30 | RESTITUTION |

| 3 rd day : WENERSDAY MAY 1 st – Working Groups of FISUEL | |
|--|-------------------------|
| 10H00 – 16H00 | Groupes de Travail |
| 4 th day : THURSDAY MAY 2 nd - Symposium – Gala Dinner | |
| 08H00– 10H00 | SYMPOSIUM |
| 10H00 – 10H15 | Break |
| 10H 15 – 12H15 | SYMPOSIUM |
| 12 H 15 – 13h15 | Lunch |
| 14H00 – 15H00 | RESTITUTION |
| 15H00 -16H00 | Works Synthesis |
| 16H00- 17H00 | CLOSING CEREMONY |
| 17H00 – 17H30 | COCKTAIL |
| 20H | DINER GALA |
| 5 th day : FRIDAY MAY 3 rd - Technical & touristic visit | |
| To be organized | |

Sponsors & Speakers: Any contributions as sponsors or speakers whose topic is consistent with the above theme, should be sent to Jamal Haydar (jamal.haydar@gmail.com) and Patrick Aubelis (patrick.aubelis@fisuel.org)

Reservation: All documents required for registration and reservations are being created

Climate: In April - May: 18 to 25 ° C

OEA, FLE & FISUEL are ready to welcome you in Beirut, Lebanon.

Mr Jamal Haydar OEA, Mr Patrick Aubelis Fisuel

Convention in Cameroon between ENEO and Customs

Cameroon – Electricity: Eneo and the Cameroonian customs, hand in hand, to strengthen the safety of electrical equipment.

By Iris BITJOKA

FONGOD Edwin NUVAGA and Joël NANA KONTCHOU respectively General Director of the Cameroonian Customs and General Director of Eneo signed Thursday 05 October 2017 a cooperation agreement to this effect.



It has become common in households to be confronted with an incident due to poor quality electrical equipment. A new extension cord or multi-plugs which suddenly goes off when plugged into the wall outlet, a fire that occurs as a result of a short circuit due to the poor quality of electrical wires used during construction, electrical cables which are cut and vandalized pylons, sawed by outlaws who plunge populations into the dark; these are among other realities to which the partnership agreement signed between Eneo Cameroon and the General Direction of Customs, must be able to end in the long term.

Because this agreement is in the framework of the reinforcement of the actions of fighting against the contraband and the frauds, carried out by the Cameroonian Customs. It aims to contribute to the improvement of the quality of the electrical service through a control of the flow of electrical equipment become a major risk of safety of people and materials. Beyond that, the General Direction of Customs wants to secure the customs revenue which this traffic deprives the State incomes.

So it's a win-win partnership. By this last, Cameroonian customs intends to strengthen the effectiveness of controls both upstream and downstream. The two parties agreed to exchange information that could help, on the one hand, the traceability of imported electrical equipment, before its installation on the Eneo network, and on the other hand, the control and seizure of stolen equipment on the electrical distribution network and intended for export.

The agreement also provides for the parties to work on the establishment of two devices for the benefit of Eneo's operations. This is the **Private Warehouse in bond** and the **Direct Removal**.

"**The private warehouse in bond** is a shop in which the imported recurring material by Eneo (Cables, meters, distribution transformers, circuit breakers, etc.) will be stored. Each material stored in this shop is duty paid only when it has to be released for use. This facility provides flexibility to the company in acquiring its inputs. This has the effect of improving inventory management as well as response times for troubleshooting teams" explains the general director of customs, Edwin Nuvaga.

With regard to the **Direct Removal** it is set up for the projects considered as urgent. "It is a mechanism that because of the criticality of the operation, facilities are granted to a credible company in the context of the clearance of the requested material. This does not dispense with the payment of fees. This facility saves time in the delivery of projects" says the general director of the Cameroonian Customs.

Mr Désiré Nansi Vice-President of Fisuel



Renewable Energy Sector in Benin

Benin has a significant potential in renewable energy², capable of ensuring its transition and its energy independence. To this end, the Beninese Government has opted to improve the energy mix by developing renewable energy sources to reach an installed capacity of 95 MW of solar photovoltaic energy and to structure a biomass-fuel sector with a capacity of 15 MW. 2021 (as it is registered under the Government's action program³).

To achieve its results, reforms are under way to create an environment conducive to the development of renewable energy. The elaboration of the first national renewable energy development policy in Benin is underway, and closely followed by a specific Unit set up at the Presidency of the Republic, with a view to bringing the necessary technical assistance to the Government in the definition of renewable energy policy and strategies

Also, with the support of the MCA II⁴, Benin now has a master plan for off-grid electrification⁵ (EHR), together with the adoption of Decree No. 2018- 415 of 12 September 2018 regulating the Off-grid electrification (EHR) in the Republic of Benin. Under this Decree, two schemes now oversee EHR projects: either simple authorization for projects with capacities below 500 KVA, or the concession for higher capacity to be deployed in specific areas through calls-tenders. The EHR Master Plan plans to deploy cumulative capacity of 41 MW of off-grid electricity by 2025 years through 205 mini-solar photovoltaic plants, 10 mini-biomass power plants and 9 mini hydroelectric power plants, for an investment of about 148 billion FCFA (226 million euros).

The ongoing reforms also concern the institutional level, the Beninese Agency for Rural Electrification and Energy Management⁶, which will have, in addition to its regal domains, to take charge of the execution of national projects of EnR and EHR.

For the time being, several projects are underway to reach the ambition of 95 MW of solar photovoltaic by 2021, including 4 ongrid⁷ plants with 45 MW of solar photovoltaic energy, financed by MCA 2, a 25 MW solar photovoltaic power station, on AFD⁸ financing, and a number of IPP⁹ solar photovoltaic projects, not to mention the very forthcoming commissioning of 80 solar photovoltaic power plants ranging between 20 and 40 kW. Also, is it envisaged the development of four 4 MW biomass power plants with the support of UNDP¹⁰ / GEF¹¹.

Benin, a member of the International Solar Alliance¹², has secured funding of 13 billion FCFA from India for the solar electrification of 550 socio-community infrastructure.

To act sustainably and favorably on its energy mix, and thus perfect its energy independence in the long term, Benin intends to reduce the cost of electric energy down thanks to the upcoming construction of 2 multifunctional hydroelectric dams in Dogo-bis (128 MW) and Adjarala (147 MW).

All these efforts will enable the country to ensure energy security for its socio-economic growth.

Note: MCA II: Smarter distribution of energy for more efficiency. Electricity engineering for nation development. Off-grid energy for electrifying isolated areas. Energy to illuminate our lives

Mr Mohamed Saizonou Contrelec Bénin



² EnR : renewable energy

³ PAG : Government's Action Program

⁴ MCA II : Millennium Challenge Account Benin II :

⁵ EHR : off-grid electrification

⁶ ABERME : Beninese Agency for Rural Electrification and Energy Management

⁷ Ongrid plant : Ongrid power plants: solar panel installations connected to the network (called "on-grid") opposite to non-connected panel installations (called "off-grid")

⁸ AFD : French Agency for Development

⁹ IPP : Independant Power Producer

¹⁰ UNDP : United Nations Development Programme

¹¹ GEF : Global Environment Facility

¹² ASI : International Solar Alliance