

*Please fill in the form in the grey spaces, by following the instructions in italic.*

<b>Country:</b>	<i>Dominican Republic</i>	<b>Date</b>	<i>9 December, 2014</i>
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<b>Title</b>	<i>Developing a NAMA to leapfrog to advanced energy-efficient lighting technologies</i>
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**Contact information:**  
*Please fill in the table below with the requested information. The request proponent is the organization that the request originates from, if different from the National Designated Entity (NDE).*

	<b>National Designated Entity</b>	<b>Request Proponent</b>
Contact person:	Mr. Pedro Garcia Brito	Mr. Francisco Mariano
Position:	Director	Director
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**Geographical focus:**  
*{Select below the most relevant geographical level for this request:}*

*Community-based*

*Sub-national*

*National*

*Multi-country*

**Theme:**  
*{Select below the most relevant theme(s) for this request:}*

*Adaptation to climate change*

*Mitigation to climate change*

*Combination of adaptation and mitigation to climate change*

**Sectors:**

Energy efficient lighting. The project will build on the regional efficient lighting strategy of Central America and Dominican Republic, adopted by energy Ministers in 2013, to develop a NAMA that would help the county implement the strategy at the national level to leapfrog to the most advanced lighting technologies, such as light emitting diodes (LEDs) and controls.

**Problem statement** (*up to one page*):

The Dominican Republic's energy sector is facing three interrelated challenges.

- 1. Global warming, population growth, and improved quality of life in Dominican Republic is accelerating the demand for lighting and appliances products.** According to the National Energy Commission (CNE, 2014)<sup>1</sup>, Dominican Republic's net energy consumption is expected to grow between 2.3 – 3% annually in the next 20 years, and electricity demand between 3.2 – 4.2% annually.
- 2. Energy subsidies are leading to wasteful use of electricity and increasing CO<sub>2</sub> emissions.** Dominican Republic's energy imports account for more than 85% of domestic energy supply and electricity generation is primarily from fuel oil and gas oil. This oil-dependency, along with the fluctuations of oil prices and foreign exchange rates impact directly the electricity costs. To prevent the negative impact on end-users, the government of Dominican Republic established a flat electricity rate, which in the long run has incentivised the inefficient use of lighting and electrical appliances in households, public and commercial buildings (CNE, 2013)<sup>2</sup>. The inefficient use of energy is leading to higher CO<sub>2</sub> emissions.
- 3. The inefficient use of energy is increasing electricity blackouts in Dominican Republic.** The energy system in Dominican Republic is affected by technical and non-technical losses (*e.g.* illegal connections), which compromise the ability of the electric utilities to cover the energy demand of the country. In addition, the electricity tariff subsidies and the non-payment of electricity bills, put electric utilities in difficult financial situations preventing them from investing in the system to provide better service.

Energy efficient lighting in Dominican Republic can contribute significantly to reduce demand, blackouts, and wasteful use of electricity for lighting. The country has an efficient lighting strategy that would grant it these benefits; however, the limited national budget has prevented the country from implementing the strategy.

<sup>1</sup> CNE(2014). Prospectiva de la Demanda de Energía de República Dominicana.

<sup>2</sup> CNE(2013). Informe Anual: Actuaciones del Sector Energético.

**Past and ongoing efforts** (*up to half a page*):

The Dominican Republic has developed a *Programa Nacional de Ahorro y Uso Racional de Energía*. This programme aims at reducing the energy consumption in all sectors, for both public institutions and the private sector.

The *Programa Nacional de Eficiencia Energética* implemented by the *Comisión Nacional de Energía (CNE)*, outlines a series of measures to improve energy efficiency. Those include an energy efficiency law, energy audits in government institutions, process of energy management in public buildings, certification, and awareness raising. CNE also instigated a project to install LED lighting in government buildings.

In 2009 the Dominican Republic acquired 13 million CFL and organized a program to exchange incandescent light bulbs. Dominican authorities cited a reduction in demand during peak hours. The total cost of the project was \$25 million.

Currently, part of the Dominican Government's institutional goals is changing lighting for all public buildings to efficient lighting to reduce electricity consumption by 10% for those institutions.

UNEP, together with its regional partners: the Mesoamerica Project, the Central American Integration System, the Central American Commission for Environment and Development and the Mexican Electric Power Saving Trust Fund, developed a regional efficient lighting strategy for Central America and Dominican Republic. The strategy includes the following elements:

1. Establishing minimum standards for efficiency, quality, safety and environmental impact that all lighting devices must comply with in order to be imported and sold in the countries in the region. These standards must be the same for all countries and have an implementation plan with a timeframe that is the same for the entire region.
2. The implementation of policies and support mechanisms that help put the transition project into practice smoothly, including:
  - Establishing a labeling system for lighting devices that helps consumers easily understand the devices' features.
  - A label awarded to lighting devices with the greatest efficiency and quality in the market.
  - Tax breaks for companies that reduce the price of their devices.
  - A program to replace incandescent light bulbs with efficient lighting for low-income families by paying for the cost of turning in their incandescent light bulbs.
3. A monitoring, verification and enforcement system to certify lighting devices and compliance requirements, a verification system that shows how devices have complied with requirements and an enforcement system to apply sanctions to those who have not complied.
4. Implementation of a system to collect and recycle lighting devices at the end of their life to avoid contamination of small amounts of mercury into the environment.
5. Approval of the mandatory Central American Technical Regulations for Lighting for the eight countries in the region that states all mandatory standards that have been established to comply with the applied transition strategy.

**Assistance requested** *(up to one page):*

Assistance is requested to the CTCN to develop a NAMA that would help the country implement the regional efficient lighting strategy at the national level to leapfrog to the most advanced lighting technologies, such as light emitting diodes (LEDs) and controls. Specifically, the country request assistance to:

- Develop the monitoring, reporting, and verification system for the efficient lighting NAMA
- Create the costing and financing plan for the efficient lighting NAMA
- Attract financing for the required investment to take place for the implementation of the efficient lighting NAMA

**Expected benefits** *(up to half a page):*

The transition to energy efficient lighting in Dominican Republic in the residential, commercial, industrial and outdoor sectors will provide energy, financial, and environmental savings, including:

- The country would save more than 730 GWh in annual electricity consumption, reducing the national electricity consumption by more than 5%, equivalent to the power output of five small (20 MW) coal-fired power plants.
- This would save the country more than US\$100 million per year in electricity bills.
- The country would avoid 430kTon of CO<sub>2</sub> each year; equivalent to the emissions of more than 100,000 medium-size cars.

**Post-technical assistance plans** *(up to half a page):*

As stated, there is a huge environmental and economic potential in a transition to efficient lighting in general, and in the Dominican Republic in particular. Efficient lighting and energy efficiency more generally already form part of the dedicated actions by the governmental institutions. It is therefore reasonable to assume that those issues will still receive the appropriate attention once the CTCN intervention has elapsed. In fact, the CTCN technical assistance could allow for on-going efforts to make significant progress and gain momentum in such a way that they could self-sustain with the appropriate instruments and financing in place.

**Key stakeholders:**

Stakeholder	Role to support the implementation of the assistance

Ministerio de Medio Ambiente y Recursos Naturales	Main counterpart; oversight; M&E
Comisión Nacional de Energía	Request proponent
En.lighten initiative	Technical assistance and source of information
CTCN	Provision of technical assistance and leverage financing
UNIDO/UNEP	Coordination and synergies with on-going activities
Inter-American Development Bank	Advice and facilitation on investment
Global Environment Facility	Support in implementing environmental agreements

**Alignment with national priorities** *(up to half a page):*

As mentioned above, a number of policies and regulations have been designed and implemented. Efficient lighting is short-listed by the Dominican Republic in the prioritized technologies stemming from the Technology Needs Assessments (TNA) carried out for the country. The Dominican Republic also contributed to the development of the Regional Lighting Efficiency Strategy in Central America.

**Development of the request** *(up to half a page):*

The request is the product of informal communication between the various governmental institutions in the Dominican Republic, internal financial institutions, and the CTCN. It stems from background work undertaken to support the development of the Regional Lighting Efficiency Strategy in Central America. CNE has taken the lead on those issues, and worked in close cooperation with the National Designated Entity (NDE) and the CTCN to craft this request.

**Expected timeframe:**

24 months, starting in 2015

**Background documents:**

CNE. Programa nacional de Eficiencia Energética  
 CNE(2013). Programa Nacional de Ahorro y Uso Racional de Energía  
 CNE. RESUMEN EJECUTIVO DEL PROYECTO : Implementación de Iluminación LED en

Instituciones Públicas

UNEP en.lighten (2012). Country Lighting Assessment : the Dominican Republic  
UNEP en.lighten (2013). Regional Lighting Efficiency Strategy in Central America  
CNE(2014). Prospectiva de la Demanda de Energía de República Dominicana.  
CNE(2013). Informe Anual: Actuaciones del Sector Energético.

**Monitoring and impact of the assistance:**

*{Read carefully and tick the boxes below.}*

By signing this request, I affirm that processes are in place in the country to monitor and evaluate the assistance provided by the CTCN. I understand that these processes will be explicitly identified in the Response Plan in collaboration with the CTC, and that they will be used in the country to monitor the implementation of the CTCN assistance.

I understand that, after the completion of the requested assistance, I shall support CTCN efforts to measure the success and effects of the support provided, including its short, medium and long-term impacts in the country.

**Signature:**

NDE name:

*Pedro Garcia Brito*

Date:

*20/02/2015*

Signature:

*[Handwritten Signature]*



**THE COMPLETED FORM SHALL BE SENT TO THE [CTCN@UNEP.ORG](mailto:CTCN@UNEP.ORG)**

*Need help? The CTCN team is available to answer questions and guide you through the process of submitting a request. The CTCN team welcomes suggestions to improve this form.*

*>>> Contact the CTCN team at [ctcn@unep.org](mailto:ctcn@unep.org)*