UN ENVIRONMENT JUNIOR PROFESSIONAL OFFICER REQUEST

General Information

Post Title: Associate Expert: Eco-Efficient Electrical Products and Markets

Unit: Global Climate Actions Unit, United for Efficiency (U4E)

Energy & Climate Branch, Industry and Economy Division

Location: Paris, Panama City or Bangkok, Thailand

Duration: Two years

Background information on the UN Environment Programme and requesting Unit:

The United Nations Environment Program (UNEP), within the system of the United Nations, is the body responsible for addressing environmental issues at the global and regional level. UNEP's mandate is to assist in the coordinated development of a consensual environmental policy, while monitoring the state of the global environment and ensuring the attention of governments and the international community on emerging issues.

One of the main objectives of the UNEP Energy and Climate program is to provide timely and relevant information to governments and decision-makers, enabling access to knowledge and skill development, supporting informed decision making in the realm of sustainability and climate policies, as well as guiding technological choices and investments.

The Energy and Climate Branch leads one of the key focus areas of UNEPs climate change programme: mitigation through the reduction of energy related greenhouse gas and air pollution emissions. The Branch supports countries to improve end use energy efficiency and increase the use of renewable energy as part of their efforts to achieve sustainable low-carbon and climate resilient development worldwide. It does so by providing strategic guidance on sound policy, technology, market structures and investment choices and thereby assists countries to reduce emissions and drive sustainable development. With its team of experts and network of partners, the Branch supports the deployment and scaling up of clean energy technologies, **including climate friendly and energy efficient cooling, heating, lighting and industrial electrical equipment** and the removal of institutional, financial, policy, informational, educational and other structural market barriers to the more widespread and rapid deployment of energy efficiency and renewable energy.

The Branch supports countries through the combination of four areas of focused intervention:

- Improving the understanding of science and engineering.
- Providing policy advice for strengthening policy and institutional frameworks.
- Catalysing public and private finance for clean energy.
- Stimulating the uptake of low greenhouse gas and climate friendly technologies.

All of the core imperatives of energy policy — reducing energy bills, decarbonisation, air pollution, energy security and energy access — are made more attainable if led by strong energy efficiency policies, including for green public and private procurement. Yet, energy efficiency, including climate friendly, eco-designed and energy efficient cooling, heating, lighting and industrial equipment is far from fulfilling its potential. Some two thirds of the world's energy use takes place without any efficiency performance requirements, despite analysis that shows it is the single largest action in the optimal pathway to a rapidly decarbonised, less polluting global energy system.

Energy efficiency will play a key role in meeting the Paris Accord ambitions for limiting the global average temperature rise to 2°C or below. To achieve a 2°C scenario or below, energy efficiency will have to account for more some 40% of energy-related carbon abatement to 2050 – or more than 170 gigatonnes of CO2 reduction to 2050, the largest share of the required reductions.

With many nationally determined contributions now including energy efficiency related targets, greater international collaboration on cooling is critically important to leap-frog successful energy efficiency policies and technology programmes, particularly to rapidly emerging economies and the global south. Initiatives such as the UN Environment Programme led public-private partnership, United for Efficiency (U4E), are key in helping to scale-up adoption of climate friendly, eco-designed, energy-efficient appliance and equipment technologies by working with policy makers and relevant stakeholders in developing countries to implement effective strategies and policies to drive sustainable market transformation.

United for Efficiency is Sustainable Energy for All's energy efficiency "accelerator" for lighting, appliances and equipment. Its goal is to accelerate the transformation of global markets to more efficient refrigerators, room air conditioners, LED lighting products, electric motors, and power distribution transformers to save over 20% of global electricity consumption. United for Efficiency comprises a large portfolio of country and regional projects that are supported by the Global Environment Facility, The Kigali Cooling Efficiency Programme and other public and private partners, including leading global manufacturers of lighting, appliances and equipment (United for Efficiency (united4efficiency.org)). It is active in more than 30 countries across Latin America, Africa, and Asia, and has a growing suite of policy support activities, tools and resources that equip policymakers to understand the opportunities and steps needed to transform their markets to higher efficiency, eco-designed appliances and equipment saving up to 20% of their electricity consumption. United for Efficiency is now expanding it's market transformation work to additional high impact sectors including heating, fans, controls, motor systems (pumps, fans and compressors) as well as computer servers.

UNEP has obtained additional funding following it's initial first 5-year phase to help increase the energy efficiency of electrical products in developing and emerging economies. UNEP has several projects with the support of several donors, including the GEF, GCF and the Clean Cooling Collaborative, delivered as part of United for Efficiency, including:

- Global High-Level Leadership, Advocacy and Communication: UN Environment Programme leads a high-level communications campaigns to encourage countries, governments and companies to take action to promote the use of energy-efficient appliances and low-global warming potential cooling products.
- Capacity Building of National Ozone and Energy Policymakers: Building on OzonAction's Regional Network meetings with Ozone officers, UNEP organises capacity building and training on climate friendly and energy efficient cooling appliances for 147 developing countries.
- Technical assistance to Strategic National/Regional market transformation and eco-efficient technology procurement projects in the main global regions (inc. China, Kazakhstan, India, Indonesia, Malaysia, Singapore, Morocco, Tunisia, Sudan, Ghana, Nigeria, Senegal, South Africa as well as Chile, Bolivia, Brazil, Cuba, Costa Rica, Honduras, El Salvador and the Caribbean): National and regional projects support the development of regulations and procurement guidelines based on current international standards & norms, labelling systems, market verification systems inc. green customs codes and financial mechanisms including bulk procurement and green public procurement guidelines & specifications for the main electricity consuming products as well as supporting the development and adoption of national energy efficiency strategies inclusive of environmentally sound management practices (eco-design, extended producer responsibility schemes and national level WEEE collections systems).

Why is the Junior Professional Officer requested/needed?

The United for Efficiency initiative (U4E) is active in supporting developing and emerging countries in their full market transformation to energy-efficient cooling, heating, lighting and industrial electrical products, by carrying-out in-country and in-region project assistance, supporting over 30 countries as well as adding a further 8 new countries in 2022 supported by the Green Climate Fund (GCF), the Clean Cooling Collaborative, DEFRA, SIDA & Norway. Requests for technical assistance made to the UN Environment Programme by developing countries in the area of electrical product energy efficiency are increasing as the awareness about the significant economic and environmental benefits from more efficient electrical products grows.

The Associate Expert is requested for two years and will contribute directly to United for Efficiency capacity building, training and policy support activities in developing and emerging economies in line with nationally determined sustainable energy commitments under the Paris Accord. The work includes supporting strategic market transformation and technology procurement projects providing hands-on technical and policy assistance regionally and nationally as well as policy maker and practitioner capacity building, energy efficiency policy planning & design technical assistance (inc. product market and national procurement assessments, development and implementation supports for minimum and higher energy performance standards and labeling regulations, market monitoring, product verification and testing (inc. international study tour supports, product database & customs code establishment supports, assistance in the development and promotion of appropriate financial mechanisms, including green public procurement of energy efficient appliances and

equipment and incentives as well as supporting the development and establishment of environmentally sound product design and waste management practices.

The Associate Expert will directly contribute to the UN Environment Programme's United for Efficiency Initiative supporting the (i) capacity building, training activities and adoption of national energy efficiency polices in more than 30 countries for climate friendly and energy efficient cooling, heating, lighting appliances and industrial electrical equipment; (ii) development and promotion of U4E global model energy regulation and green procurement guidelines for electrical appliances and equipment; (iii) increased engagement of U4Es global product manufacturers, partners and the initiatives with United for Efficiency project countries, and (iv) support the addition to United for Efficiency of the new 8 project countries in implementation of their market transformation and eco-efficient technology procurement programmes.

Supervision

The Associate Expert will work under the direct supervision of the United for Efficiency Programme Manager, Mr. Paul Kellett, through the regional office team leads and as part of the United for Efficiency international team and under the general supervision of Mrs. Miriam Hinostroza, both within the UN Environment Programme's Energy & Climate Branch.

First reporting officer:

Paul Kellett

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Second reporting officer:

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Content and methodology of the supervision

 Introduce the Associate Expert to the work of the Branch, especially its Climate Mitigation and Energy Efficiency Portfolio, and the specific elements for which he or she would be responsible.

- Give the Associate Expert a clear personal work programme with milestones and indicators against which performance would be measured.
- Introduce the Associate Expert to the global, regional and national project partners under the initiative.
- Meet weekly with the Associate Expert to assess progress with the implementation
 of the duties assigned, review problems encountered and evaluate the level of job
 satisfaction as regards professional development and learning objectives.
- Meet quarterly with the Associate Expert for a more formal discussion and evaluation of work progress.
- Provide regular feedback, guidance and mentoring as regards work-plan development and project implementation.

First appraising officer: Mr. Paul Kellett

Title first appraising officer: Programme Management Officer (United for Efficiency

Programme Manager)

Unit first appraising officer: Global Climate Action Unit

Location first appraising officer: Paris

Second appraising officer: Mrs. Miriam Hinostroza

Title second appraising officer: Senior Programme Manager, Energy and Climate Branch

Location second appraising officer: Copenhagen

Duties, responsibilities and output expectations

Terms of Reference:

- To support capacity building and training activities to countries and regions in support of their nationally determined contribution commitments to the achievement of the Paris Accord, in particular for climate friendly and energy efficient cooling, heating, lighting and industrial electrical equipment:
 - Collaborate with other organizations and teams, including the UNEP Collaborating Centers in Copenhagen and in Switzerland (BASE) to help deliver collaboration between countries on the achievement of electrical energy efficiency measures included in their nationally determined contributions.
 - Help oversee the production, adaption and promotion of model regulations, green public procurement guidelines and training material by partner organizations and initiatives to ensure the high quality of the final products for countries.
 - Support the gaining of the commitment of regions to work with United for Efficiency to implement regional and national projects on harmonised standards for energy-efficient appliances to accelerate the implementation of best global minimum and higher energy performance standards.
- To support the development and promotion of United for Efficiency knowledge tools and resources, including global model appliance regulations, green public procurement guidelines and national eco-efficient electrical product strategies for developing and emerging economies to transform their markets to energyefficient appliances and equipment.

- Building the comprehensive body of knowledge on the status of climate friendly and energy efficient policies and savings potential for the countries considered with priority to developing countries and emerging economies with energy efficiency measures included in their nationally determined contributions.
- Developing policy and strategy frameworks for the implementation of energy efficient appliance and equipment policies in developing and emerging countries in line with nationally determined contributions.
- Developing information resources and tools for countries and regions to facilitate the faster transition to climate friendly and energy efficient cooling, heating, lighting and industrial equipment.
- Providing information, based on this work that facilitates U4E communication campaigns underpinning the Paris Agreement, country efficiency commitments and the importance of eco-efficient electrical products in reducing global energy emissions and air pollution.
- Underpinning of best practice for energy efficiency policy implementation in countries and regions on energy-efficient cooling appliances (refrigeration and air conditioning inc. controls), heating appliances (heat pumps), lighting (LED and controls), computer servers, and industrial equipment (motors, pumps, fans, compressors, power distribution transformers and smart grid systems).
- To support the development of partnerships and country level supporting activities, including with United for Efficiency's global manufacturers of appliances and equipment. In collaboration with the U4E team, help formulate and grow strategic implementation partnerships, including with the major multinational manufacturers of cooling appliances and equipment.
- To support the preparation and promotion of model eco-efficient product market transformation and technology procurement project designs, based on the growing portfolio of successful United for Efficiency projects.

Output expectations

- Increased capacity of developing country and emerging economy officials to carry-out policies, actions and projects on energy-efficient electrical products in line with meeting their nationally determined commitments in support of the Paris Accord.
- Updated analysis of the national and regional saving potential and policy status for energy efficient appliances and equipment. Country by country analysis on the readiness of the policies for each priority country, efficiency standards and relevant actions.
- Technical policy assistance is provided to developing countries and emerging economies to help facilitate the implementation of national market transformation projects on energy-efficient appliances and equipment.
- Support is provided to U4E projects and other relevant product efficiency projects, including project document preparation, emissions and air pollution reductions calculation and analysis, support to the organization and coordination of international technical study tours.

- Increased engagement of manufacturers to the United for Efficiency initiative and gaining their commitment to support the faster market penetration of energy-efficient products in developing countries.
- Commitment from new countries to transform their market to energy-efficient products. Additional developing countries recognize the large savings potential of energy-efficient appliances and develop strategic medium-term projects to fully transition their markets, with priority to those countries with energy efficiency measures included in their nationally determined contributions.

Travel

Missions and costs of travel envisaged during first year of assignment: Two to four missions at a cost of US\$ 5,000 to US\$ 10,000

Missions and costs of travel envisaged during second year of assignment: Two to four missions at a cost of US\$ 5,000 to US\$ 10,000

The UN Environment Programme's Energy and Climate Branch will provide any part of the mission cost that exceeds those covered by the donor government.

Training and Learning Elements

Training:

The Associate Expert will be provided with training (language, computer, gender equality, and security training and in particular, support for professional development in the area of sustainable energy systems and product market transformation processes) depending on specific personal needs in light of work requirements. Training will also include the technical and policy components of climate change mitigation issues, appliance & equipment energy efficiency and financing & incentive mechanisms, depending on needs. In addition, the regional staff training units offer a wide variety of courses.

Learning elements:

After one year the Associate Expert will have:

- An understanding of UNEP's broad climate change and mitigation portfolio;
- An understanding of the challenges and opportunities faced by developing countries in the achievement of their sustainable development objectives, as well as their international commitments;
- An understanding of the role of UNEP in the United Nations system as well as UN rules;
- The experience of working with multiple governmental actors that require support in the effective implementation of their policies and partnerships, as well as capacity building in preparation for the implementation work of their INDCs (national contributions to the fight against climate change);

- Gained a comprehensive understanding of, and experience with the application of, the United for Efficiency initiative's market transformation and technology procurement processes at global, regional and country levels, including cooling, heating, lighting and industrial electrical equipment efficiency programme planning, design and implementation activities as well as working with the international public and private sector partners.
- Developed negotiating, training, editing, writing, reporting, organisational and evaluation skills.

After two years the Associate Expert has:

- Applied the United for Efficiency initiative's market transformation and technology procurement programme processes at both country and regional level.
- Gained experience of the hands-on implementation of various integrated strategic policies and actions that can transform markets to energy-efficient cooling appliances.
- Developed a good understanding of the functioning of the global electrical product market manufacturing sectors, including private sector energy efficient product development process, priority environmental areas of interest and support measures to the initiative and to the regions & countries to accelerate market penetration of much more efficient appliances and equipment.
- Supported the development of networks and relationships in regions and countries of interest to the United for Efficiency initiative, including in Latin America and the Caribbean, Africa and Asia.
- Be able to practically apply to the respective home country or region upon completion of their assignment the principles of electrical product market transformation and eco-efficient technology procurement (in support of saving up to 20% of global electricity consumption with the corresponding financial savings, energy security & competitiveness advantages as well as related greenhouse gas & air pollution reductions at regional and national levels).

Qualifications and experience

Qualifications

 Advanced university degree (Master's degree or equivalent) in environmental management, sustainable development, international relations, economics, engineering, policy planning, infrastructure development, or another academic field of relevance for the position.

Sk<u>ills</u>

- Excellent analytical, communication, planning and organization skills.
- Fluency in English, both written and spoken is required; a working knowledge of other UN languages would be an asset.

• Ability to establish and maintain effective working relations within a multi-cultural and multi-disciplinary working environment.

Working experience

- Relevant work experience of at least four years at the national level or two years at the international level in sustainable development, energy efficiency, or implementation of environment-related programmes, projects and activities.
 Prior experience at the international level or in climate change is advantageous.
- Experience with developmental projects, emerging economies and developing country contexts would be an advantage.

Competencies

- Teamwork
- Professionalism and Reliability
- Resourcefulness and Organisational

Duty Station(s) and Living conditions

If Paris, normal living conditions for a developed country;

If Bangkok: Normal living conditions for developing country in South-East Asia;

If Panama City: Normal living conditions for developing country in Central America;