



In this feature, we present **Angella Rainford**, Nominee, Energy Personality Award

In 2017, as part of CARICOM Energy Month, the CARICOM Secretariat organised three regional competitions:

- the **Energy Personality Award**, to recognize someone who has made, or is making, an exceptional contribution to a sustainable energy future in the Region;
- the **Young Energy Artist Competition**, for children aged 12 and under;
- the **Energy Month Youth Essay Competition**, for students in three categories: tertiary (ages 16-30), secondary (Forms 1-3/ Grade 7-9) and secondary (Forms 4-6/ Grade 10-13).

An investment professional, Angella Rainford has put her experience from the world of finance and business to give back to her native Jamaica by securing both the land and funding for a 37MW solar-power utility capable of producing clean energy, employing local people (including women) and reducing the country’s energy bill. Dynamic and versatile (she has a pilot’s licence and plays the piano), full of curiosity for the world surrounding us (as proved by her travels around the globe, including solo backpacking from China to Pakistan), Ms Rainford is a role model for women and young girls, an advocate of gender equality and an achiever who knows how to combine business, environmental sustainability and community participation.

Jamaica is highly dependent on fossil fuels for the production of energy, meaning that it is subject to the vagaries of international oil prices, contributes to the emission of greenhouse gases and, due to its ageing infrastructure, is only able to offer its population an unreliable supply of electricity at a high retail price (around USD 0.30/kWh). A chance remark in 2012 about the proposed changes in the regulation of the renewable energy market in her home country, led Ms Rainford to look into the investment possibilities this might offer and how, with one action, four objectives could be achieved: create a viable company that takes advantage of the new regulation, contribute to modernising Jamaica’s electricity market, abate the factors contributing to global warming, and reduce the vulnerability stemming from the reliance on fossil fuels.

The culminating point in Ms Rainford's efforts was the successful bid of Eight Rivers Energy Company (EREC), a joint venture she created with French Neoen, to construct the solar plant in Westmoreland in 2015, when Jamaica's Office of Utilities Regulation (OUR) decided to fill 37MW of capacity left vacant by the previous year's permits for wind and solar projects. When completed, this will be one of Jamaica's cheapest sources of power at around 8.5 cents/kWh and not only the country's largest photovoltaic plant, almost double in size to the grid-connected Clarendon Content Solar park inaugurated in 2016, but also of the wider Caribbean region. *"Additionally, it is on the western side of the island, while much of the power generation is closer to Kingston,"* Ms Rainford points out, which *"works well, as it is well positioned for the western demand centres of the island, such as Montego Bay."*



Ms Rainford and colleagues at the Westmoreland construction site

Overall, during its expected lifespan of twenty years, the plant should result in foreign exchange savings of USD 250 million for Jamaica thanks to fuel-cost substitution. Additionally, the 200 jobs created during its construction will contribute to the training of a workforce capable of lending its expertise to the realisation of other such projects in Jamaica, while the solar plant's functioning is expected to create 30 permanent employment positions.

As Ms Rainford stresses, the project's success lies in the fact that the local Parish Council was kept abreast of events as they developed and is considered an important partner for its viability. In her own words *"community engagement is absolutely critical for this type of project. The lack of community buy-in can, quite frankly, kill a project from being implemented. We also believe that it is because of the community that we were awarded this project (... which) is also important for the workforce both during the construction and the ongoing operation of the plant."*

The importance of involving civil society in renewable energy options is further highlighted by the fact that Ms Rainford was instrumental, with funding from the Clinton Foundation and others, in launching training programmes for at-risk youth in the community, conducting renewable energy lessons at the two neighbouring secondary schools and organising a competition to increase the



Together with (L to R): Jamaica's Minister of Science, Energy and Technology Dr Andrew Wheatley, Ms Hillary Alexander (MSET) and Mr Ansord Hewitt (Director General, Office of Utilities Regulation)

pupils' interest in the subject, promoting community awareness and public consultation. At the same time, this allowed her to point out the benefits for the community in terms of capacity-building and employability, as the plant also aims to develop the local workforce in the field of renewable energy construction, maintenance and management of the facility. A first significant step in this direction is the empowerment of women in the detailed assembly work, particularly the racking parts, where EREC estimates that 20-25% of the workforce could be female.

EREC's success in Jamaica and this country's legal framework shouldn't hide the fact that, for the Caribbean as a region, one of the main challenges to the generalisation, or at the least a broader dissemination, of renewable energy solutions to its needs is regulatory. As Ms Rainford stresses

“throughout the Caribbean, we are blessed with strong solar irradiation and therefore, on a comparative basis, we are able to produce solar power competitively to alternative energy sources. However, without a transparent and robust regulatory framework, it is challenging for investors to participate in our markets.” Yet once this obstacle is overcome, she is confident that the future offers great opportunities in terms of sustainable energy. In fact, she looks forward to the new advances in relevant technology, and is *“particularly excited to see how improved and lower cost storage technology will change this market.”*

As a woman in a field traditionally reserved to men, the challenges Ms Rainford faced were many and varied, and not only because of the project’s wide range of requirements, from gaining purchase rights to the plot of land for the facility to mounting the financial structure needed to carry out the investment, or from doing the groundwork to inform local society about the project and its scope to finding the right mix of technical equipment to withstand the corrosive effects of the nearby sea, hurricane winds and seismic activity and also deliver a reliable energy output. However, her optimistic and tenacious outlook means that today she is one of the rare female entrepreneurs in the energy market – and a successful one at that.

In her eyes, two of the most rewarding moments during the project’s launch were *“seeing the looks of awe and excitement [among the members of the Westmoreland Parish Council] as they saw the plant construction unfolding in a time-lapse video of a solar plant being constructed, and the realisation that this would be built soon in their neighbourhood”* and *“knowing that our power plant will be one of the cheapest sources of power for Jamaica, which will result in significant foreign exchange savings (...) and also in positive environmental externalities”*.



“I am very optimistic for the future of sustainable energy in the region,” says Angella Rainford

What would be her advice to young Caribbean professionals and entrepreneurs thinking of getting involved in the renewable energy sector? *“Develop a skill that is relevant to the sector either before entering renewables or while in it. In my case, my primary skill set is in private equity and therefore I have applied my financial experience to the renewables market. There is a great need for engineering talent, as well as policymakers (...) Identify what skills are needed in the renewable energy space and be tenacious in developing the skill that you are best at and, most importantly, that you really enjoy.”*

Or, to put it differently, *“always maintain an optimistic outlook and focus on the learnings from a fall and on how to get back up. Learn, adapt and execute,”* says Ms Rainford. *“There were many hurdles I faced as an entrepreneur in this market, including not being successful the first time I tried. However, the success we have now with the solar project in Jamaica is a function of that getting back up and try, try, and try again mindset.”*