



In this feature, we present **Hannah Olmberg-Soesman**, 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).

*A dynamic entrepreneur with a background in social work and a degree in law, Hannah Olmberg-Soesman has managed to bring together the different strands of her professional life and plait them together into new opportunities for communities living in the hinterland in her native Suriname. Focusing also on women’s empowerment, she and her company team have been instrumental in introducing off-grid solar systems to remote villages, thus opening up possibilities for better school education, medical care and small-scale business to augment these families’ income, while at the same time proving that, once the initial outlay paid for, clean energy proves to be a determining factor of local development.*

Geographically an Amazonian country with dense tropical forests, but Caribbean both historically and culturally, Suriname has a population of 591,919 people (2017), whose vast majority is concentrated in its northern coastal strip (around 90%), with an estimated 66% living in an urban environment. Suriname’s topography, which determines its demographic concentration, but also the particularity of its energy sector, characterised by public initiatives, private companies and households whose electricity output is not necessarily interconnected. Especially the around 200 villages in the hinterland are mainly off-grid cover their energy needs through the use of microgrid government-provided or privately owned generators (polluting, expensive to run and often in need of repairs), or limit their productive, educational and social activities to daylight hours, relying on kerosene lamps for any tasks that need to be undertaken after dark. It is into this vacuum that Guguplex Technologies SAC Ltd. was launched in 2012; its goal is to offer tailor-made energy solutions, based on solar technology, that are targeted at improving the lives of the company’s customers, particularly low-income households in rural areas without access to electricity, and making “development on any scale a tangible reality”.

A mother of five, Hannah Olmberg-Soesman is one of the moving forces behind the business model followed by Guguplex Technologies in Suriname, which without doubt has enhanced the company's reputation both domestically and abroad and contributed to its success. For Guguplex Technologies is not only a company specialised in the commercialisation and installation of solar power panels; it also trains its customers on how to install them and carry out necessary maintenance and repairs, proposes a range of payment options (including a system of micro-loans), and carries out activities to educate communities about the benefits of solar technology. This approach means that it is the first Surinamese solar company to train over a hundred villagers from different areas in the country's interior and the first such company, too, to carry out awareness activities estimated to have reached at least 200,000 people throughout Suriname.

Since its creation in 2012, Guguplex Technologies has managed to make a name for itself as a company that delivers the quality it promises – and which, when needed, can also function as a bridge between consumers -individuals or communities- wishing to access solar energy, and organisations providing micro-finance. This brought the company to the attention of the Amazon Conservation Team, a non-profit organisation that works in partnership with indigenous people to protect and conserve the biodiversity of the Amazon rainforest. As a result, in October 2016, Guguplex Technologies was commissioned to install a 600-watt stand-alone solar system for the native medical centre of Pelele Tepu, an Amerindian village situated close to the border with Brazil. The project also entailed breaking down traditional gender roles and social stratification, so that the women of the village, with no or little formal education, learnt how to install the solar panels and carry out basic maintenance.



Hannah Olmberg-Soesman on the job: initiating the women of Pelele Tepu, an Amerindian village in Suriname's interior, on how to install a switch box



Installing a solar system on another rural home to ensure 24/7 electricity for the family

With a firmly established track record (ten schools, 622 households representing 2,500 people, a district commission and medical centres equipped with small systems), Hannah Olmberg-Soesman's experience in the solar sector was a valuable asset in implementing this project and in taking on the additional challenge of training a women-only group – which she did by bringing in an all-women team of technicians! In this way, she was able to combine two goals through a single solar system installation: bring a sustainable-energy solution to a remote village that is off-grid, and empower women to pursue their dreams by building their self-confidence and proving to them that they are

capable and hence able to successfully undertake tasks considered as a male prerogative. At the same time, this proved to Mrs Olmberg-Soesman her own capacity to confront and overcome challenges, as she had *“to make a complicated technical application simple, accessible and applicable to village women”* and of which the majority only spoke their native tongue, a task she completed resoundingly well: not only was the solar system (comprising a solar panel, a solar

controller, a power converter and battery storage) installed without mishap, but the most introvert of the women, belonging to the lowest village caste, was soon confidently instructing the men on how they could help. Furthermore, the training provided to the women was conceived so that the basic knowledge they acquired now allows them to carry out the maintenance of this solar system, but also to increased their self-confidence to assist in the installation and/or repair of small, private solar systems in their village.

This said, Mrs Olmberg-Soesman is no stranger to challenges – which she has taken up and transformed into strengths. Thus, for instance, she has had to overcome *“the challenge of creating awareness of the need and many advantages of solar energy, since it was a rather new phenomenon in Suriname when I started the business and I also had no prior technical education”*. Except for finding ways to keep the company afloat during Suriname’s recent crisis, the other great challenge was *“winning the trust of village and regional traditional authorities to operate inside their territory, because in the interior the local village leaders and their upper leaders have more authority than the central government. So, in order to execute any project within their region, you have to gain their trust before you can even enter their territory and be accepted by the villagers”*. In all evidence, this is something she has achieved, together with her team.



Hannah Olmberg-Soesman with her team of empowered women once the solar system for Pelele Tepeu’s medical centre had been successfully installed

As for the Caribbean as a whole, the principal challenge, says Mrs Olmberg-Soesman, is that *“there is not enough practical and engineering knowledge and skilled persons in the region. We need to invest in developing knowledge, higher education on energy and the execution and product engineering and development and maintenance to become self-reliant as a region.”* Together with the *“lack of a long-term roadmap for the adoption and sustainable use of solar energy”* and the difficulties encountered by potential end-users to access the financial resources needed to effect a transition to renewable energy, this remains a handicap that governments need to address.



Renewable energy is a means of contributing to social, economic and educational development, while also preserving Nature, says Hannah Olmberg-Soesman, and this is what she strives for

So, were policy makers to ask for her advice, Mrs Olmberg-Soesman would encourage them to adopt a three-point approach: a) pass legislation facilitating the import, development and implementation of renewable energy solutions; b) invest in formal and professional education relating to sustainable energy so that the region might have its own, local professionals to turn to when implementing this transition; and c) adopt a proactive stance towards the electricity grids’ development, while simultaneously adopting the laws and standards needed to ensure that grid-tied systems are installed professionally and

sustainably. Asked about the future of sustainable energy in the Caribbean, Mrs Olmberg-Soesman is optimistic – and convinced that the region’s comparative advantages of abundant sun, wind and water can help this transition. Furthermore, *“well aware that it will take some time on a government level to see the results in legislation and a national governmental project,”* she also believes that *“society, and especially villages outside the grid, don’t have to wait for the government to take and execute these measures [as] renewable energy, or any kind of energy, doesn’t have much relevance if it doesn’t actively contribute to social, economic, educational, and national or regional development. Communities and villages can make a start by making good use of renewable energy products and systems within their own community. With the development that this will bring, it will make it an easier task for governments to join in or take up the movement.”*

In all of this, Mrs Olmberg-Soesman knows what she is talking about, as her personal experience proves that where there is a will, there is a way. By starting at the grassroots level and empowering people to improve their livelihoods and rise out of poverty, the impetus in favour of a transition to renewable energy can only gain ground, at the same time as being an *“effective tool towards maintaining or restoring Nature and preventing an increase of global warming”*. Her success to date is, in fact, due to this conviction which she has implemented through raising awareness of the benefits of solar energy, commercialising the means to harness it and offering free installation and maintenance training to end-users, while also providing access to financial solutions that make individual, small-scale projects viable.