

Sustainable energy solutions

INTERVIEW WITH H.E. PROF. ROLPH PAYET FRGS

MINISTER OF ENVIRONMENT AND ENERGY, REPUBLIC OF SEYCHELLES



ROLPH PAYET is an expert on environment, climate and island issues, and was the first President of the University of Seychelles. He is a founding member of the Global Island Partnership, the Sea Level Rise Foundation, the Seychelles Centre for Marine Research and Technology, the Island Conservation Society and the Silhouette Foundation. In 2007 he shared in the IPCC Nobel Peace Prize as an IPCC Lead Author and was selected a Young Global Leader by the World Economic Forum.

Please outline the Ministry of Environment and Energy's remit and objectives.

The Seychelles Ministry of Environment and Energy is responsible for the protection of the islands' natural habitat, guided by the principles of sustainable development. This requires developing long-term conservation and diversity plans and policies, as well as the active management of biologically and ecologically sensitive areas, while at the same time providing opportunities for scientific research and eco-tourism activities. The ministry also manages protected areas and provides support to local NGOs and private agencies engaged in conservation.

At the same time, the ministry is responsible for overseeing energy policy. Chief among the socio-economic growth objectives of the Seychelles is reducing our dependence on fossil fuels by promoting renewable energy and greater energy efficiency.

Providing electricity to every household in Seychelles is a challenging and expensive task involving two costs: that of producing electricity, which is paid for from customers' bills, the revenue from which is used to buy fuel and to cover operating and other costs. The second cost is guaranteeing security of supply. This is not borne by consumers, and is instead usually covered by the government or through other, external, mechanisms. For example, all the fuel we need to produce electricity has to be shipped in by tankers that must travel great distances across the Indian Ocean. In recent years, the threat of piracy has significantly increased both the cost of transport by sea in the region, as well as the risks of attack by pirates: a few years back a tanker carrying cooking gas was hijacked, resulting in shortages.

Keeping the seas safe from pirates involves significant costs, but unless it is done, the fuel we need to produce electricity cannot be guaranteed, with the resulting risks of disruption. As we rely heavily on tourism as our main bread earner, and this activity relies heavily on electricity, then the impact of not having electricity in our hotels will be felt throughout every sector of the economy. In short, our energy supply is precarious and we badly need to address the issue.

What are your strategies for dealing with precarious energy supplies?

Already energy deficient, Seychelles' continued population and economic growth has placed enormous

demands on the electricity sector. Development of alternative modes of energy generation, such as wind, will not only reduce our nation's dependence on costly imported fossil fuel, but also address many environmental problems resulting from the burning of fossil fuels. Furthermore, to effectively protect itself from external fuel price volatility and ensure energy security, Seychelles aims to end its long-standing over-dependence on imported fossil fuel.

Following the sharp rise in oil prices in 2008, the government took a decision to reduce our dependency on imported oil by diversifying electricity production. Based on the recommendations of a task force, the first step was to create the Seychelles Energy Commission. Its job was to provide guidance to the government and private sector on the best technology for the job. Feasibility studies showed that the most viable alternative energy options for Seychelles were biomass, solar, wind, and waste-to-energy. The government also took the decision to allow private investors to participate in the production of electricity. Most investment in the electricity industry, using renewable energy technologies, will be taken care of by the private sector.

What is the government doing to facilitate the use of renewable energy sources?

To achieve sustainable levels of energy independence, energy efficiency and conservation must be developed, and this should be matched by increased investment in renewable energy solutions. The inauguration of the Port Victoria wind farm in June of last year was an auspicious occasion that clearly demonstrates the commitment of the government to address energy issues. Seychelles has considerable alternative energy resources such as wind, solar, biomass, and biogas. There is a need to fully exploit them. Converting these potential energy sources into actual energy means creating an enabling environment, investment, and appropriate technology.

What about solar energy?

The next big step is the full-scale development of solar energy. Île de Romainville has been chosen as one of the main sites to develop solar energy, where five out of a total of eight turbines are located. A scheme has also been put in place to allow the private sector to

help develop the photovoltaic market. The Clinton Climate Initiative is assisting Seychelles to develop a waste-to-energy project, whereby a significant proportion of garbage will be converted to energy, a win-win policy that will also significantly improve our waste disposal issue. We are also looking at the use of biomass resources to produce a significant portion of our energy requirements. Current energy policy is preparing the country to be able to produce 30 per cent of electricity through a combination of wind, solar, waste-to-energy and biomass by the year 2030.

To conclude, please tell us about the ministry's work in protecting the regional environment.

Seychelles is a global leader in environment related issues. The islands are known for their spectacular coral reefs, which are important nursery habitats and breeding grounds for several vulnerable and endangered species such as lemon sharks, rays, and bonefish. Marine life around the islands is an excellent ecosystem for activities such as eco tourism, which will raise awareness of the need to create more special reserves. The Aldabra and the Vallée de Mai atolls, home to the unique Coco de Mer palm, are both UNESCO World Heritage sites. The ministry is increasing the number of protected areas, particularly for the outer islands, where special reserves will be created. Under legislation dating back to 1991, special reserve refers to an area set aside in which characteristic wildlife requires protection and in which all other interests and activities are subordinated to this end.


Seychelles is also at the forefront of several initiatives for Small Developing Island States. The Western Indian Ocean Coastal Challenge (WIO-CC) was proposed by the President Michel, who called on countries in the region to commit to actions based on a shared long-term vision. WIO-CC is a regional initiative through which governments in the Western Indian Ocean to work together to address the unavoidable impact of climate change and rising sea levels, and to promote ecosystem-based adaptation strategies. The objective of this approach is to increase resilience and maintain

essential ecosystems while at the same time reducing the vulnerability of the region's inhabitants to climate change.

President Michel also initiated the Global Island Partnership (GLISPA) in 2005 in Mauritius. GLISPA is a global entity working to help islands around the world conserve and sustainably utilise their invaluable natural resources.

GLISPA was created to help bridge local and global island initiatives, build upon existing networks and programmes and share knowledge among all islands. It was formed following the Mauritius International Meeting in 2005 following a request from the Presidents of Palau and the President of the Seychelles for a global partnership that enabled islands to work together to share solutions.

The partnership brings together island nations and nations with islands — small and large, developing and developed — to mobilise leadership, increase resources and share skills, knowledge, technologies and innovations in a cost-effective and sustainable way that will catalyse action for conservation and sustainable livelihoods on islands.

GLISPA has grown rapidly since its establishment as an informal network. It has helped to catalyze more than US\$100 million in commitments to island conservation and connected more than 60 nations and organisations to advance the work on island conservation. GLISPA is currently working with the Government of Seychelles on WIO-CC and is enabling inter-regional as well as inter-island sharing of experiences through the partnership. 



Chief among the socio-economic growth objectives of the Seychellois community is the need to gradually reduce our dependence on fossil fuel by promoting renewable energy and greater energy efficiency

The windfarm, just off Port Victoria