

Student Led Initiative Wins IEEE Award for Outstanding Humanitarian Achievements

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Today, the Institute of Electrical and Electronics Engineers (IEEE), presented e.quinox, a student-led initiative from Imperial College London, with the inaugural 'Presidents' Change the World' award. The prize included \$1,000 and the title of Outstanding Student Humanitarian Project. IEEE, the world's largest technical professional society, selected the group from more than 200 entries submitted from around the world.

The Presidents' Competition was established to recognize students who develop unique solutions to real-world problems using engineering, science, computing and leadership skills for the benefit of humanity.



"We are pleased to see e.quinox recognized for its important and innovative work," said one of the co-founders of e.quinox, Matthew Dayton. "This award speaks for the ingenuity and commitment to helping world communities that e.quinox embodies."

The e.quinox project consists of the design and installation of site-specific solar powered energy kiosks in Rwanda. Villagers will be able to exchange drained lead acid batteries for charged ones and to plug in cell phones or other rechargeable devices. The centralised charging station could also be used to run community infrastructure such as water pumps. Students from the Kigali Institute of Science and Technology in Rwanda have teamed up with e.quinox to implement the pilot project this September for the Minazi community, which lies in Rwanda's mountainous region.

E.quinox is doing far more than providing energy for small communities. The initiative is creating a surge in motivation and potential for such projects, both within the student base across universities and amongst larger governmental and corporate institutions. Their partners, The Institute of Engineering and Technology, Light Up the World, and Global Village Energy Partnership have shown great enthusiasm for the project.

According to Jennifer Kohlhammer from Light Up the World, a leading worldwide charity in the energy sector, "To say that e.quinox is an important initiative is an understatement; the initiative is absolutely essential. The impact that renewable energy lighting solutions can have on the developing world is tremendous. As such, the task being undertaken by e.quinox will not only provide light for needy people, it will change their standard of living for the better."

Rwanda's estimated population of 10 million people has had the worst per capita electricity supply in the world since 2005, with up to 96 per cent of households literally left in the dark. Economic recovery, slow in Rwanda since the genocide of 1994, is hindered by relentless power

supply shortages. The lack of industry, transport and other services is reflected in the fact that 97 per cent of the country's energy consumption comes from the household sector. Strong demand and unexpectedly low lake levels have left the country's hydropower plants struggling. The problem is exacerbated by the decaying national utility network. Power supply has become so irregular that the country has had to begin switching to expensive diesel powered water stations.

The renewable energy point envisaged by e.quinox intends to supplement or replace existing kerosene stations on which community residents rely for their cooking and lighting needs. The scheme utilises a successful ownership model that ensures the program's sustainability. The head of the Electrical and Electronic Engineering Department at Imperial College London, Professor Peter Cheung, said, "This is an example of student-led, societal aware initiatives that we expect to come out from Imperial. It provides opportunities for our students to apply what they have learned to the benefit of the world community."

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Notes to editors:

1. Rwanda's local government has set a development agenda, known as Vision 2020, to focus on the problem. However, the program's success relies on the private sector and donors. The top priority now is rural electrification based on enhanced distribution networks, micro hydro, and solar power. Recent tariff increases needed to fund refurbishment of infrastructure, owned by the national power supply company ELECTROGAZ, have nearly doubled the costs to the consumer. The high costs have left the majority of the population considering implementing their own generation systems that will be more reliable and at a lower cost.

2. e.quinox was founded as a society at Imperial College London in 2008. e.quinox has significantly benefited from the contribution of its team members, which are listed on its website, <http://www.e.quinox.org/?s=team>.

3. e.quinox receives no financial compensation for its work. This enables 100% of sponsors' aid to go towards fulfilling the programme's and its supporters' shared goal; meaning an investment in e.quinox goes further and accomplishes more. E.quinox welcomes sponsorships and donations to support this important work in East Africa. Potential sponsors should contact the group's treasurer Alexander.rybka06@imperial.ac.uk.

4. **Light Up the World (LUTW)**: an NGO that specialises in similar projects, which has to date implemented 14,000 such missions in 42 countries worldwide.

5. **Global Village Energy Partnership International (GVEP)**: a charity whose aim is to provide support by networking like-minded organisations (currently accommodating 2000 of these) worldwide, in order to promote growth that is both rapid and robust.