



Executive Summary August 2018

Global 1000 Schools Project (G1000)

History and Development of the G1000 Schools Project

The project concept began during early 2015 with three different focuses:

1. A pilot phase during which demonstration projects including solar PV, solar thermal, bio-digester, wind turbine and energy efficiency technologies were installed at Waterford Kamhlaba. This was made possible by the Zayed Future Energy Prize www.zayedsustainabilityprize.com
2. Academic research spanning 8 months and the production of 3 research papers. During the initial academic research phase 3 questions were asked:
 - a) Could renewable energy develop the economy of a nation and where would one start?
 - b) As education is the primary building block of any economy, the next question asked was why was there disconnect between the teaching of sustainability at learning organizations and the practical implementation of sustainability at these same organizations – in particular the development of a renewable energy program.
 - c) A final question that was asked was whether an economic model could be developed to encourage investment in learning organizations that made economic sense for the funder and addressed the perceived hypocritical gap in 2 above.
3. The development of an Energy and Sustainability Hub in which learners could meet to discuss the future and what it is that learning organizations need to do to reach this future. This project was made possible through the generosity of a private funder.

A series of technical experts were also employed to develop the pre-feasibility phase of a project that eventually became known as the Global 1000 Schools Project. A Proof of Concept learning organization (Waterford Kamhlaba United World College of Southern Africa, Swaziland) was chosen to develop the pilot project. The scale of the organization meant that various concepts could be tested for feasibility.



On completion of the pre-feasibility studies, a memorandum of understanding was signed with a funder to develop the project to financial close. The signing of this memorandum was indicative that there is an appetite for organizations to invest into sustainable development projects, and at the same time satisfy the financial returns required by traditional investors to support projects such as G1000 as it able to prove bankability.

From an educational aspect the Proof of Concept demonstrates that the learning organization can close the hypocritical gap and to practice what it preaches. The organization becomes 100% responsible for its energy use, carbon emissions, develops a circular economy, and at the same time allows investors the opportunity to develop sustainable and genuine socially responsible investment projects while avoiding green washing. The learning organization also develops a continuous flow of 'Climate Change Ambassadors' through its theoretical and practical demonstration of carbon neutrality.

Future Components identified for the successful roll out of projects at learning organizations included:

1. The roll out of energy efficiency programs including smart technologies
2. The development of a solar PV plants with storage
3. The successful deployment of solar thermal for hot water and heating
4. Where possible the installation of wind power (if not possible, then at minimum the installation of a small onsite wind turbine for demonstration and education purposes)
5. The development of biomass plants and where possible including reforestation projects for the cultivation of feedstock for the plant, and a food project within the plantation. A further option is the purchase of waste feedstock from a FSC plantation
6. The redevelopment of black water treatment plants to provide water for the plantation and food farm and at the same time treatment of excess flow before release into the environment (if not connected to the municipal grid)
7. The development of a municipal waste treatment plant and recycling centre
8. The development of an Energy and Education centres
9. The development of a strong environmental, climate change and renewable energy education program including demonstration circular economy for example permaculture gardens – dining halls – food waste – biodigester – biogas for hot water – by product fertilizer for permaculture gardens.



G1000 has also analysed cost versus benefits, infrastructure development, Structure and Financial sustainability of projects and very importantly how to and who are the funders of these projects.

During the process described above it became evident that the success of the G1000 would depend heavily on the team driving forward the various components (turning Principles into Practice), the Development and Funding Model, Partnerships and Associations and who the funders would be.

In analysing all the various components of the project, it was also decided to include the Sustainable Development Goals as a benchmark for projects to ensure that as many different types of project could be considered for development. To further strengthen project impacts the work of Project Drawdown www.drawdown.org is used as an excellent benchmarking source; containing an enormous body of research and technical data.

In the final phases prior to launching the crowd funding platform, G1000 performed an in depth risk analysis to ensure the integrity of projects and funding was maintained. This Risk Matrix is also available as a Resource.

Further reading:

Managing for Change
Measuring and Making the Future
Understanding the World
G1000 Risk Matrix
Project Drawdown