



How to Apply

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Frequently Asked Questions

A. General Questions

1) What are the categories of the Prize?

The Zayed Future Energy Prize awards 5 categories:

- Large Corporation
- Small and Medium Enterprise (SME)
- Non-Profit Organisation (NPO/NGO)
- Lifetime Achievement Award (For an Individual)
- Global High Schools (1 award for each of the below regions)
 - The Americas
 - Europe
 - Africa
 - Oceania
 - Asia

2) What is the Prize fund per category?

The total Prize fund is US \$4 million, distributed as such:

- Large Corporation – Recognition Award (No monetary value)
- Small and Medium Enterprise (SME) – US\$ 1.5 million
- Non-Profit Organisation (NPO/NGO) – US\$ 1.5 million
- Lifetime Achievement Award (For an Individual) – US\$ 500,000
- Global High Schools – US\$ 500,000 – Total value, divided amongst 5 Global High Schools in 5 different geographic regions, awarding each up to US\$ 100,000
 - The Americas
 - Europe
 - Africa
 - Oceania
 - Asia

3) Where does the Zayed Future Energy Prize fund come from?

The Prize fund comes from the Abu Dhabi Government as a way to honour and continue the legacy of the late founding father of the United Arab Emirates, Sheikh Zayed bin Sultan Al



Nahyan. Masdar, Abu Dhabi's renewable energy company, manages the Zayed Future Energy Prize. A dedicated team works on the Prize all year round.

4) What are the criteria of the prize?

The Prize criteria for all categories are: Innovation, Impact, Leadership and Long-Term Vision. To learn about the selection criteria specific to each category, please click [here](#).

5) Who are your previous winners?

The previous winners and runners-up of the Zayed Future Energy Prize can be found here in the "Winners and Runners Up" section of our website.

6) How are the winners chosen?

All submissions go through our four tiered evaluation process:

1. A reputed international **Research & Analysis** firm conducts due diligence on all submissions to ensure that they meet the criteria of the Zayed Future Energy Prize: Impact, Innovation, Leadership and Long-Term Vision.
2. The **Review Committee** meets to evaluate and score the short-listed entries received following the due-diligence.
3. The **Selection Committee** reviews every entry and the final entries are sent to the Jury for final evaluation.
4. **Global High Schools Committee** reviews, assesses and score all entries received for the Global High Schools category and select the finalists
5. The **Jury** meets in person to discuss the entries and select the winners per category. The final decision is unanimous and the winners will be announced during the Zayed Future Energy Prize Awards Ceremony taking place in Abu Dhabi during the Abu Dhabi Sustainability Week.

B. About the Awards Ceremony

7) When does the Zayed Future Energy Prize awards ceremony take place?

The Zayed Future Energy Prize Awards ceremony takes place during the Abu Dhabi Sustainability Week every January.

8) Where will the awards ceremony take place?

The awards ceremony will take place at Abu Dhabi National Exhibition Centre in Abu Dhabi, UAE.



C. Global High Schools Category

9) How is the Global High Schools category different from all the other categories?

For the Global High Schools category – we ask schools to submit proposals for funding consideration to implement sustainability measures in their schools. These measures could range from the implementation of technologies to the incorporation of curriculums. In response and as a commitment to the United Nations Secretary General's Year of Sustainable Energy for All - the Global High Schools prize, that aims to encourage innovation amongst youth in developed and developing nations alike, is open to educational institutions targeting high schools students from grades 9 and above.

Aside from the Global High Schools category; winners of the Zayed Future Energy Prize must demonstrate already existing impact, innovation, leadership and long-term vision. A proven track record is essential to the submission.

10) What do you mean when you say that the Global High Schools category must adhere to the principles of the Sustainable Energy For All Initiative?

This award is a commitment of the UAE to the Sustainable Energy For All Initiative which has three objectives: doubling renewable energy, doubling energy efficiency and clean energy access. Therefore, the programme or project that the school is submitting for must be related to one or more of the objectives.

D. Questions on the Nomination/Submission Form

11) How do I apply?

Interested entrants can submit using the online submissions portal. This can be accessed through the homepage of the Zayed Future Energy prize website. The basic steps are as follows:

1. Click on the "**Submit for the Prize**" tab in the center of the Homepage or click here to gain access to the submissions portal
2. The portal will prompt you to create an account by entering a Username and Password. Please keep this on hand should you wish to save your submission and return to it at a later date to complete it.



3. Answer the questions on the form and click on "**Submit**" if complete or "**Save**" if incomplete.

- If you clicked on "**Submit**", you will receive an automatic email confirming receipt of your submission and will include a copy of your responses for your record keeping purposes.
- If you clicked on "**Save**", please make sure to return to your submission to complete it at a date prior to the submission deadline.

Please note that a video tutorial explaining the process of using the online submissions form will also be available within the portal. This may also be accessed [here](#).

12) Should we be interested in submitting for the Prize, will we have to incur any participation fees?

There are no fees associated with completing a submission or nomination.

13) Apart from the Submission Portal, is there any other way that one can submit an entry for the Prize (ex. Email, Airmail)?

In order to ensure fair assessment; all submissions for the Zayed Future Energy Prize must be made through our online portal. Should you need any assistance in finalising your submission/nomination, please feel free to contact us at info@zayedfutureenergyprize.com or +971 2 653 6012.

14) Can I complete the submission form in any language other than English?

The Prize only accepts entries completed in English.

15) What is the submission/nomination deadline?

Every year, the submissions/nominations deadline varies. Please visit our website for more information at www.ZayedFutureEnergyPrize.com

16) Are the submission and nomination deadlines extendable?

The submission and nomination deadlines are not extendable.



17) Can I come back to my application at a later date and complete it after I have started it?

Yes. You will be able to save your application for later repeatedly until you feel confident enough to submit your entry.

18) Can I modify my application after “submitting” if it is prior to the deadline?

Should you not be able to complete the submission form, the portal will allow you to save your responses so that you can return to it at a later date (as long as it is before the deadline). Simply log in using the credentials you used to set up your account. Changes cannot be made to a submission after clicking "Submit".

19) Will I receive feedback on my submission if it does not go through?

All submissions receive feedback. However, should the submission not reflect one of the four criteria - the feedback will only reflect that the submission did not meet the minimum requirements. Should any entrant require additional feedback; please contact us on info@zayedfutureenergyprize.com.

20) Can I resubmit for the Prize every year?

Any company/ individual/ high school can resubmit every year for the Prize. This does not, however, apply to the winners. Winners can only apply after every 5 years.

21) Can I apply to multiple Categories?

Candidates can only submit one entry per category for consideration.

22) What is the maximum file size that can be uploaded as attachments to a submission form?

As the different panel of judges are reviewing each submission, it is best to keep your attachment size as low as possible. A maximum of 5 attachments are allowed at a maximum file size of 7 MB per attachment.

23) Can I include videos to compliment my submission?

Yes, videos can be included in the 'Attachments' section of the form.



24) Are there specific video formats that you accept in the attachments section of the Submission form?

All video formats will be accepted should you choose to include one in the attachments section.

25) Can a Lifetime Achievement candidate submit for the prize without being nominated?

Candidates for the Lifetime Achievement award will need to be nominated by a second party or themselves.

26) Does a Lifetime Achievement candidate need to fill an entry?

No. Candidates will only need to be nominated, no submission entry will be required. The due diligence will be conducted by our research and analysis partners.

27) Which category would be most applicable to a research organisation?

The category that would be most applicable to a research organisation would be the Non-Profit Organisation (NPO/NGO) category.

28) Which category would be most applicable to a new start-up specialising in an emerging technology or service related to renewable energy/ sustainability?

The criteria of the Prize require a proven track record of Impact, Innovation, Leadership and Long-term Vision. If the emerging start-up fits these criteria then it would be most suited to apply in the Small & Medium Enterprise category.

29) Can I send additional material that will compliment my submission via email?

No additional material will be accepted via email or airmail. All material relevant to your submission should be submitted through the online submission portal.

30) Do the response boxes in the submission form accept graphs and charts?

The response boxes in the form only accepts plain text. Therefore, candidates will be unable to include graphs and charts in these response boxes. However, there will be a separate attachment facility for you to upload your supporting documents such as graphs and charts. Please describe each attachment as an "Appendix" - i.e. Appendix A – Graphs and Charts. You may upload them as Word, PDF or JPG files.



31) Will hyperlinks work in the answer boxes of the Submission/Nomination forms?

The answer section only accepts plain text so please avoid using charts, tables and hyperlinks. Should this information be critical, kindly include this in a word document and attach it in the Attachments section of the submission form.

32) If I experience any difficulty in my entry who should I contact?

Please feel free to contact us at info@zayedfutureenergyprize.com or +971 2 653 6012.

33) Do I need to include financial information?

Yes, financial information will have to be included. Every information submitted will be handled with the strictest of confidence and will only ever disclose such information to the panel of judges.

E. Post-Submission

34) How will I be notified of receipt of my submission?

All entrants will receive a notification email upon submitting. This email will also contain a copy of your submission for your own record keeping purposes.

The Administration of the Zayed Future Energy Prize constantly monitors submissions. We are alerted to those that are complete and those that are incomplete. You will receive a reminder email to complete your submission as we approach the deadline.

35) Will I receive a copy of my submission?

Yes. The confirmation email you will receive after completing the online form will contain a copy of your submission.

36) Will I be notified if I have been shortlisted?

Yes. You will be notified by email by the Prize administration. You will also receive an email explaining the discrepancies in the submission, should you not make the shortlist.

Please note that a public announcement of the finalists of the shortlisted candidates can only be made following the meeting of the Jury of the Prize.



37) Do you award the same winners twice?

In order to ensure that every year we recognise individuals, organisations and high schools that need the encouragement to persevere – the Zayed Future Energy Prize awards a winner only once.

38) Can I publicise my status as a shortlisted candidate?

The Zayed Future Energy Prize has recently incorporated a new non-disclosure policy on announcing shortlisted candidates. The Prize will announce the shortlisted candidates only following the Jury meeting. At this time, should you or your entity be listed as one of our finalists then you are free to publicise this as well.

39) Will the judges visit the candidates as part of their assessment?

The judges will not visit or communicate directly with the candidates as part of their assessment. For this reason, it is imperative that all information critical to your submission be included in the entry form.

40) Will the Prize fly the finalists to Abu Dhabi for Awards Ceremony in January?

All finalists will be invited to attend the ceremony. All travel expenses and accommodation will be covered.

41) What will I be expected to use the Prize fund for, should I win?

The winners of the Zayed Future Energy Prize are asked to sign a contract with Masdar detailing the relationship between the Prize and its winners.

The Prize fund should go towards the sustainability program or initiative described in the submission. Alternatively, dedicating the fund to new sustainability ideas is also possible.

For the Global High Schools category, the fund is to be used to implement the proposal and satisfy the obligations (including any timing requirements) as set out in the proposal.

42) Who can I contact should I have any inquiries or uncertainties?

For general support or inquiries on the submissions process, please contact at info@zayedfutureenergyprize.com or +971 2 653 6012. For any technical queries, please contact our tech support team at techsupport@zayedfutureenergyprize.com



How to write a winning submission

Submissions for the Zayed Future Energy Prize go through a lengthy review process and are marked meticulously. However, we receive hundreds of submissions and the quality can vary considerably.

To help you with your submission, we have put together ten pieces of advice to follow.

1. We want to feel excited by your submission. Try to cover all of your main points as directly and succinctly as possible, with minimal repetition. Each question has a word limit, but think of this as a maximum, not a target. The more easily we can see the merits of the submission, the better its chances.
2. Add context. Give specific examples. If your product improves people's lives, say how. If your company operates renewable energy plants, tell us the generating capacity and the proportion of the total national/regional capacity. Illustrative case studies, concrete facts and insightful comparisons can give the judges a better idea of an application's true worth. Remember that your application has to make sense to a non-specialist.
3. When referring to data, use one of our preferred data sources if possible. If everyone is referring to these and similar widely-cited, reputable sources, we can compare between entries more easily and fairly. Remember also to benchmark your facts and figures against the most relevant industry segment.
4. Define acronyms and abbreviations the first time you use them, even if they're common. For example, your first mention of UNEP should be as follows: "the United Nations Environment Programme (UNEP)". Indian 'discoms' are 'distribution companies' first time around.
5. Help us do our research on your entry: include a few hyperlinks to external data sources, biographies, LinkedIn pages, press releases or articles on independent media outlets. Remember to check that they work!



6. When describing how a person or product is innovative, remember to point out the specific innovative feature or features. If you own a patent, give the number and tell us where the patent applies.
7. If you include any data tables, remember to point out the main features in the text to help focus the reader on your main achievements and merits. For example, in the case of a renewable energy operator that has listed its assets by type, it is helpful to point out that “wind and geothermal power are the largest components of this company’s portfolio, with 60MW out of a total 80MW”.
8. If you have goals, ambitions and visions for the future, say how you expect to achieve them and whether you are on track so far. If you have faced a struggle, tell us how and why things will improve.
9. Submissions must be in English. If English is not your first language, try to have an English speaker review your submission. This makes the review process much quicker and easier.
10. All of the above takes time, so start preparing and writing your submission early.



Sample Submission

A. Non-Profit Organisation – Liter of Light

Executive summary

- 1. Please give us a short introduction to your organisation, and its activities in renewable energy and/or sustainability in particular. [Max 100 words].***

The Liter of Light redesigns access to lighting for equatorial countries - this simple, two-step "sachet" solar technology creates local jobs, teaches green skills, and empowers local communities.

Liter of (Day) Light is an affordable DIY system that allows the sun's rays into homes, schools and public centers for less than US\$2. Using recycled plastic soda bottles, 10 millilitres of bleach, and distilled water, the bottle is placed through galvanized steel sheet roofs common to many developing countries. The (night) light is a repairable solar battery upgrade kit that is community built for \$10USD or \$25 for streetlights

Video1-http://www.youtube.com/watch?v=o-Fpsw_yYPg

Video2-<http://www.youtube.com/watch?v=uKKPZGpc-Kg>

Impact – 35%

- 2. Please tell us what kind of work your organisation does, and how it is important. In particular, please list your major achievements, with particular emphasis on how you have improved human lives in the past five years, and how you have promoted clean energy and sustainability. Help us understand the significance of this by giving tangible, quantitative figures and comparisons where possible, including details of beneficiaries, geographies, deployment, success stories, etc. Feel free to outline any major obstacles you have faced, and how you overcame them. If relevant, please use your organisation's financials (in terms of revenues, income streams and costs) to support your comments. [Max 400 words]***



One billion people in the world and twenty million people in the Philippines suffer from energy poverty. While the cost of solar power has decreased over the past few years, all products are still assembled abroad and imported. People only see the part where off-the-shelf, brand new lights are bought, but two to three years down the road, most of them end up in landfills. If a solar battery dies or even a simple part breaks, they are incredibly difficult and expensive to replace or repair, especially without microcredit or aid. The result is developing countries continued dependence on imported solutions to solve local problems, a dependency that becomes even more severe during national disasters.

When MyShelter Foundation launched the Liter of Light project, it followed three guiding principles. First, the materials to build solar lights should be available locally and easy to replace. Second, the skills used to train people should be easy to teach. Lastly, and most importantly, it should result in livelihood for people in local communities. We began with one carpenter, one solar bottle daylight, and one paid installation in April 2011. Sunlight refracts through the bottle and bends to light the space below with 55 watts of brightness, saving an average of US \$10 in electricity bills a month and 250 kilos of carbon a year (WWF).

Through social media and community replication, our movement has spread; 145,200 households in the Philippines, and 353,600+ homes in over 15 countries with main offices in Manila, Switzerland and Colombia.

The second phase of the program provides solar training and supplies kits to cooperatives to teach them how to build Liter of (Night) Light systems by hand. Micro-solar panels or solarettes, which are manufactured and widely available in the Philippines (SunPower operates in the country), are assembled by hand, and other electronic parts, easily accessible in most cities, are locally assembled. With a simple circuit panel, drill, and soldering, an upgrade night solar LED light is built and inserted into the already installed Liter of (Day) Light. This makes deployment in disaster areas and refugee centers quicker as solar products are built from parts quickly and local skills and livelihood is created in the camps, not to mention reparability of the items.

Women's cooperatives now operate building the Liter of Light solar night lights in Philippines, India, Bangladesh, Pakistan, Kenya, and Colombia. Foundation earns from selling raw kits



- 3. How have your organisation's activities resulted in broader change beyond your direct actions? Discuss the wider impacts of your achievements – e.g. how your own work has created opportunities for other organisations or resulted in further developments in technology, policy, adoptions etc. [Max 250 words]**

Working on the ground in the Philippines has shown us that large panel installations in rural areas fail. When batteries or parts fail, it is too expensive or difficult to get repairs done, and most are left to deteriorate.

Open source technology for solar lighting is the basis for the viral replication the Liter of Light project which began in San Pedro, Laguna, in April 2011. It was conceived as do-it-yourself program that could easily be replicated by anybody in the Philippines and around the world using readily available parts and simple carpentry skills. Rather than relying on large-scale, imported, or patented technologies, the Liter of Light sought to create grassroots green lighting movement parting from the principle that anyone can and should become a solar engineer.

By making training manuals and instructions available online through online video tutorials and social media, the Liter of Light was able to rapidly expand to over 15 countries within the first 20 months, Each country has developed its operations and programming at the local level, but shares technical knowledge, conducts troubleshooting, and crowd-sources innovations to the technology through regular coordination calls and emails. In decentralizing the technology and the means of implementing the Liter of Light around the world, we have been able to exponentially grow our operations and impact.

In 2014, the organization is currently working with the UN High Commission on Refugees (UNHCR) in Ethiopia to test and build community streetlights and tent lights for a camp of 200,000+ families.

Innovation - 30%

- 4. What are the key innovative approaches, solutions or products that your organisation has developed for the renewable energy and sustainability sectors? What problems do these innovations solve and what benefits do they deliver to whom? [Max 350 words]**



Most businesses for solar products are built on designed obsolesce. It is designed for the battery to break, or to be thrown away without the ability to repair after two years even though some parts are still good. Knowledge or access to parts for repairing and how it works is not part of the package; just to continue to buy new replacements every few years.

Liter of Light's is about training and building the solar lights small; "sachet " kits of 1-3 watts of LED and solar panels as replacing parts are cheap and available. Big solar installation on classrooms in rural areas need expensive replacements every few years that communities cannot afford and the unit is left to rot.

It's not about retailing finished products imported from factories abroad, but gives considerable training and access to green skills, innovation and livelihood to local groups in building the solar lamps, mobile chargers, and street lights from scratch with available parts.

It has mostly trained persons with disabilities (PWD) to build our solar lighting products. Involving PWDs, women's groups, and economically marginalized groups in this grassroots solar movement has allowed the Liter of Light to build a cadre of solar engineers with technical skills to solve energy poverty in their community. These groups are the main sources of feedback for figuring out ways to make the lights more functional, practical, and useable. They know what their communities need, and because they understand how the technology works, they are empowered to offer innovative ideas for making the product better.

On the installation side, the volunteers who work with us are community-based groups that identify priority barangays (neighbourhoods) for installation; survey the area to assess the feasibility of installation; and monitor the use of our night lights and street lamps after installation. By involving local groups in the installation process, we ensure that earn at every step and they maintain ownership over the way that the Liter of Light can benefit their community, and that the programs expansion continues to be community-driven.



5. *What do people do instead of using your approach? What comparable solutions or initiatives exist already? How unique are your innovations? [Max 150 words]*

Liter of Light is unique as it uses waste bottles, PVC pipes, and local components to manufacture solar solutions for mobile chargers, lamps, and streetlights for communities. Small solar is affordable and easy to fix.

Most solar products are created with a centralized management and manufacturing. These are then imported into the different developing countries and locals are employed as retailers through profit sharing. Very little skills training and technology sharing happens in this transaction and it usually a seller and buyer relationship with no building of local industry and innovation.

Liter of Light is decentralised with each country having different partners having the full independent capacity to build and install solar bottle lights, local communities are tapped for assembling, new product innovation, and uses local electrical parts for reparability. In short, the local community participation to design, build, maintain and earn from solar assembling products in almost every step.

Long Term Vision – 20%

6. *What is your vision for the future of renewable energy and sustainable development, and how will your organisation help shape it? What are the main obstacles you will need to overcome in order to realise this vision? Please include details of significant planned developments and future achievements. [Max 250 words]*

The western model of renewable energy is usually about large financed wind or hydro turbines, but maybe the idea of small, massively implemented micro solar is equally powerful.

Sustainable and renewable energy must become more local and community based. We want community based micro-solar products to be assembled and available to meet the needs of their energy poor areas around the world.

The traditional model of aid or micro-credit to afford imported fully assembled solar lights, mobile chargers, and solar pedestrian lights will only foster dependency on replacing the entire stock every few years. Additionally, the untold story of large installations of solar on islands in the Philippines in fourth and fifth class municipalities is that after a few years very few if none are working when the battery breaks or a part bogs down. During the new installations, there are contractors, consultants, and



community organizers, but when repairs need to be done in the next years, no one wants to be responsible for maintenance.

Our vision is to create bottom-of-the-pyramid assembly lines and green jobs using already small available electrical parts, LED, and solar panels. By focusing on 1 - 4 watts of solar lights, lithium- ion computer batteries are readily available in the cities, and micro-solar panels are more available. If unavailable in provinces in the Philippines or in other countries, we can ship the missing parts initially, but from experience as demand increases, there will be suppliers that will start making it more available with the new demand.

7. *How financially secure is your organisational model in the long term? Please explain in terms of future revenue/profit expectations and/or fundraising for the next five years. [Max 200 words]*

Liter of Light is a truly unique social enterprise model in securing a steady revenue.

The way it operates is to install a relatively cheap \$2.00 USD affordable plastic bottle with water and (10ml) bleach into the roof of low income urban (and rural) houses which bring in sunlight during the day. This saves about USD \$ 5-8 of electricity by bringing in daylight. These thousands of houses as databased and in a few months, the area grassroots entrepreneur returns to offer an upgrade to an LED night solar solution. In short, all the houses with plastic bottle daylighters are potential customers for the more expensive \$10 night lights.

We expect to fully expand to 20 countries with the night solar solution by 2016 with more cooperation with international suppliers such as Philips (LED lights), Samsung (batteries), and SunPower (solar panels) to deliver quality supplies to all our local suppliers.

Our income increases about 60% every year for our trainings for corporations and NGOs and sales of kits to assemble the solar lights.

By end of 2014 we expect to pass global revenue of \$500,000 a year in community based solar lights.



Leadership 15%

- 8. Other than the achievements mentioned above, how has your organisation and its management team worked to raise awareness of renewable energy and sustainability issues? Please give details of your members' involvement in major industry associations or advisory bodies, agenda-setting for the industry, policy development or other areas of leadership. [Max 200 words]**

2015 is the United Nations Year of Light.

The Museum of Modern Art (MoMa) in New York will be displaying the Litter of Light from January to June 2015.

Additionally, the founder Ilac Diaz is a 2014 TED Fellow and will be speaking in Rio, Brazil for the Global Ted Talks.

Liter of Light has worked with the UN Development Program (UNDP) in the recent Haiyan rehabilitation by teaching and installing solar bottle lights in temporary shelters and rebuilt housing in Tacloban (Leyte), Cebu, and Iloilo with 12,600+ families who lost their homes to the storm surge.

Every Saturday at its headquarters in Taguig, there is an ongoing volunteer operation to build solar lights for the typhoon victims. There are 2,860 active volunteers who have signed up to build emergency solar lights and streetlights during the last six (6) months.

The foundation continues to give inspiration talks to schools and corporations as well as paid day trainings to those that want to learn to build solar products.

- 9. How sustainable are your own operations? How have the actions taken within your organisation inspired individuals and other organisations to address the challenges facing world in terms of renewable energy and sustainability? [Max 150 words]**

Liter of Light has inspired and empowered young people in the Philippines and in other countries to be able to take part in reducing energy poverty. By making assembly and installation of solar lighting affordable with daylight and easily built micro-solar lights, this has allowed small women's groups, people with disabilities (PWD), and community organizers to be part of the solution and not just left in the dark.



The Philippines has an electricity rate only second to Japan leaving many with a choice to skimp on money that would otherwise have gone to essentials such as education, nutrition, and other basic needs. The other is to resort to the illegal and often dangerous wiretapping. With solar becoming a locally assembled product that is affordable and repairable makes sustainable energy available for all.

This open source solution has already inspired viral replication around the world.

Other Relevant Points

10. Please tell us about any other aspects of your organisation, not covered above, that you feel are relevant to your candidacy for the Zayed Future Energy Prize [max 300 words]

Small, bottom-up community based approaches have not been studied as a potential solution to energy poverty.

Like micro-credit, micro-solar is built on the community sustaining its success. The difference with traditional models is that the people are taught how it works, how it is assembled, how its parts can be sourced, and how to innovate and how to create local solar products, rather than just retailers, buyers, and consumers.

What is not measured in the financials is capacity building and grassroots innovation. Those that are taught how to make these solar products will tinker, add, change and design new products that were not part of the original product.

Case in point was when basket weavers in Iloilo would make beautiful lampshades around the solar bottle lights and earn more by mixing the traditional crafts with the solar lamps. How fishermen would put them in glass jars and use them for long trips out into the sea.

And this new products and design for solar will be only the beginning of a new economy in green technologies.



B. Small to Medium Enterprise - M-KOPA Solar

Executive summary

- 1. Please give us a short introduction to your organisation, and its activities in renewable energy and/or sustainability in particular. [Max 100 words]***

M-KOPA Solar (M-KOPA) is the market leader in 'pay-as-you-go' energy services for off-grid customers - combining mobile payments with GSM sensor technology to enable the leasing of solar power systems.

It was created on the founders' belief that mobile technology could create a leapfrog opportunity in energy and address a huge market need. Across Africa and South Asia one billion off-grid homes spend a combined US\$50 billion per year on fuel substitutes.

Since its launch in October 2012, M-KOPA has connected more than 80,000 homes in East Africa to solar power and is adding over 1,000 homes a week.

Innovation - 35%

- 2. What are the key innovative approaches, solutions or products that your organisation has developed for the renewable energy and sustainability sectors? What problems do these innovations solve and what benefits do they deliver to whom? [Max 350 words]***

M-KOPA's innovation approach is one of design, test and adjust. And thanks to its rich customer data, leveraging a deep understanding of off grid energy and financial services consumption habits. The M-KOPA solution is designed around a game-changing technology - mobile money. The founders realized that being able to move a small amount of money around, at a low cost, could revolutionize energy access.

They discovered that off grid households in Kenya were spending about 50-60 cents every day on dirty and dangerous kerosene, because of a lack of alternatives and only having enough disposable income to buy small daily amounts of any household necessity.



M-KOPA is able to offer good quality solar energy systems, collecting payments in small amounts and allowing customers to choose when and how much they pay. This is where the innovative combination of mobile payments and smart embedded technology comes in.

The company uses embedded mobile technology to remotely control that equipment, to monitor its performance, troubleshoot issues, as well as control its operational state. M-KOPA can disable systems remotely if payments are missed, or reactivate them when customers catch up.

Mobile money acts as the payment engine for customers and M-KOPA's sales agents. To use that effectively, the company has developed a proprietary, patented technology platform called MKOPAnet that organizes the management of mobile payment instructions, plus the data and information required to run the M-KOPA service.

This has also enabled the company to simplify the sign up and payment processes. To get M-KOPA, customers don't need a bank account or any kind of collateral. In Kenya, customers can sign up through one of over 1,000 agents' points country-wide. All they need is a registered mobile money account and a valid ID card. Customers pay an initial deposit of US\$35, followed by 360 daily payments of 47 cents.

They can make payments daily or in batches of any size when they have some extra cash. And they can do it from the market, from their house or wherever they can get a mobile signal. This is critical in remote, low-income communities.

3. *What do people do instead of using your approach? What comparable solutions or initiatives exist already? How unique are your innovations? [Max 150 words]*

Taking M-KOPA's home market of Kenya as an example, only 20% of the population has access to mains electricity. Governments and development partners are trying to address this issue. But for the remaining 7.8 million off grid households, mains connectivity is still a distant prospect, due to a combination of geography and cost.

M-KOPA sells a plug-and-play 5W solar system with three lights (two-wall hanging and one portable), a solar rechargeable radio and a mobile phone charging port. This combination lighting, radio and phone charging is what the company's market testing



has shown to be the energy package that caters to the basic needs of an off-grid household.

And importantly, with this combination offering, M-KOPA is able to displace dangerous fuel-based lighting from the home with a more convenient, clean and modern alternative.

- 4. *Do you have a way of defending your innovations from your competitors? Or, alternatively, do you intend for them to be easily replicated by others? In either case, please explain how, including patent numbers or hyperlinks if appropriate. [Max 200 words]***

M-KOPA's scalability is enabled by the firm's patented and proprietary data platform, M-KOPAnet. It encapsulates years of R&D and know-how in bringing sophisticated and life-changing products to base of the pyramid consumers, numbering an estimated 40 million globally.

That is why M-KOPA, along with its technology partner Eseye, started licensing this technology platform to partners outside of the company's core East African markets in July 2014. We think it is the best way to have a huge impact on markets, where we do not have the resources or time to scale up ourselves.

M-KOPAnet currently connects the embedded SIM card, engineered into each M-KOPA Solar system, with the mobile money platform. It manages each systems performance, disabling it if payments are missed and reactivating it when customers catch up.

M-KOPAnet collects more than 100,000 device location records, 250,000 payment records, one million solar panel readings and one million battery readings monthly. This rich data collection helps detect demand patterns and improve the offering in real time.

M-KOPA expects this technology can be replicated into different categories and service offerings, to potentially offer a range of life-changing products to low income consumers globally.



Long Term Vision - 30%

- 5. *What is your vision for the future of renewable energy and sustainability, and how will your organisation help shape it? What are the main obstacles you will need to overcome in order to realise this vision? Please include details of significant planned developments and future achievements. [Max 250 words]***

Our vision is that the one billion people living off the electricity grid will get clean, affordable power without the need for the grid. We see a future where the grid will appear old fashioned and increasingly consumers - rich and poor - will generate their own power on their own rooftops.

We believe strongly in solar, but are not blinkered about it, versus other forms of renewable energy technologies. Our focus is on the affordability of such technologies, working to make stand-alone power generation as affordable to consumers as the grid.

We believe that when companies in our category blossom and really take scale, the market for off grid energy will be as transformative as mobile telephony.

We have currently scaled to reach over 80,000 homes in two markets, in under two years. When we look just at Kenya, our 75,000 households in represent just over 1% of the addressable market. While this is an achievement for a new business, the scope and scale of need in Kenya and elsewhere is simply massive.

That is why we have set ourselves a target of one million homes in Kenya by 2018. This is hardly the end, but the critical next step in proving our vision.

- 6. *How financially sustainable is your organisational model? Please explain in terms of future revenue/profit expectations and/or fundraising for the next five years. [Max 200 words]***

In less than two years we have built a company that generates over US\$1 million in revenue each month. We are on track to reach our US\$15 million FY14 revenue target. We have also successfully raised over US\$25 million in capital (through a mix of equity, debt and grants).

While our business could be profitable today, (we have surpassed our original business plan in terms of revenue per month) we are not planning to turn a profit in the next few



years. Instead, we are planning to reinvest all cash flows into growing the business further and faster.

We ultimately project that we can generate more than US\$100 million revenue per year by 2018.

- 7. *How scalable are your activities? Please explain the size of the opportunity in terms of the potential addressable market for your solutions, initiatives, products or services. Include target customers/ segments where appropriate, remembering to benchmark your figures against external data where possible. [Max 250 words].***

There are six million off-grid homes in Kenya, of which, we have calculated 30% can afford the product we sell today. We are rapidly developing other systems, which can match the needs and cashflows of the other 70% of the off-grid market.

Our realistic expectation/target is to reach one million (or 18%) of off-grid homes by 2018 with a mix of these products. The delta between 18% and 100% is not due to lack of demand, but due to the time it takes to effectively and smartly scale a lending-based business.

Outside of Kenya we know there are a further 14 million households off the grid in Uganda and Tanzania. The combined 20 million household East African market is our primary target for scaling operations. However we also see great potential in other developing markets and will license our technology to others in regions like West Africa and South Asia.

Impact - 20%

- 8. *Please tell us about the scale of impact that your organisation's achievements have had, technically, organisationally and socially, as applicable. Help us understand the significance of this by giving tangible, quantitative figures and comparisons where possible, including details of customers, geographies, success stories, etc. Feel free also to outline any major obstacles you have faced, and how you overcame them. [Max 400 words]***

The problem we are solving is the affordability of access to clean energy. Most of M-KOPA Solars customers live in rural areas in East Africa and have per capita income of less than US\$2 per day.



There are over one billion people around the world who do not have access to the electricity grid. This causes global problems in poverty alleviation, productivity, education, health and safety.

M-KOPA Solar has connected 80,000 households in East Africa to clean, affordable and bright light. It is connecting over 1,000 homes per week, making it one of the fastest growing utility providers in the region.

Existing M-KOPA Solar households will realise projected savings of US\$750 over a four years average usage of the system. Multiplying \$750 times 80,000 households totals an estimated US\$60 Billion in consumer savings. This gives people more money in their pocket to spend on education, business and other potentially transformational opportunities for their families.

In the month of June 2014, M-KOPA Solar households have enjoyed 10 million hours of kerosenefree lighting. This is based on an average of 125 hours of lighting per system per month, figures that we can track and monitor on our M-KOPAnet platform.

The lack of a quality light source has traditionally had knock on effects in productivity, by curtailing people's opportunities to work after dark. M-KOPA customers are able to cost-effectively continue productive activities after dark, be it running retail outlets, farming or conducting countless small home-based production ventures that exist in low-income communities.

This also applies to children; millions of whom around the world are forced to try and complete homework huddled around candles or kerosene burners. This has a direct impact on the quality of their work and their health. 92% of M-KOPA customers report that M-KOPA has improved their children's ability to study.

92% also report that they also now felt safer at night, with their solar system reducing the risk of structural fires and severe burning injuries usually associated with fuel-based lighting.

M-KOPA is an important engine for the development of mobile money and its related services. By July 2014 it had generated over two million M-PESA transactions.



M-KOPA has its headquarters in Nairobi, Kenya and employs 300 local staff in its management and operations divisions. It also gives a livelihood to over 500 direct sales agents based in the field.

- 9. Please outline your organisation's financials over the last five years: Using the table below, please give your approximate annual revenues, costs and profits (if applicable). In the accompanying text, please include details of your major financial backers, and add any relevant additional information on your financial position. [Max 250 words]**

M-KOPA has received R&D grant and concessional investment capital from several leading development organisations, including the Shell Foundation and the UK Department for International Development.

We have also formed a close technical, distribution and marketing partnership with Safaricom. This is Kenya's leading mobile network operator with close to 18 million subscribers and 15 million users of M-PESA (its market-leading mobile money platform).

M-KOPA's lead equity investor is Gray Ghost Ventures, a VC based in Atlanta USA. It has raised debt capital from Acumen Fund, LGT Venture Philanthropy, and Lundin Foundation for the 2012-13 period. It has also received R&D grants from Shell Foundation, the UK Department for International Development, and USAID.

In February 2014 M-KOPA announced it has successfully closed US\$20 million of fresh capital to fund its aggressive growth agenda. US\$10 million of this was through a commercial debt facility, led by a Kenyan bank, Commercial Bank of Africa (CBA).

M-KOPA's successful 2014 capital raise sets the company on solid financial footing for the next two to three years. The main challenge facing the business in terms of scaling is now personnel, operating systems and execution.

Scale beyond this plan will require more capital, principally in the form of debt and equity to service a larger base of customer receivables.



Leadership 15%

10. Other than the achievements mentioned above, how has your organisation and its management team worked to raise awareness of renewable energy and sustainability across the industry and in the wider world? Please give details of your members' involvement in major industry associations, agenda-setting for the industry, policy development and other areas of leadership. [Max 200 words]

Nick Hughes, Chairman and Chief Strategy Officer, leads new product and new market activities for M-KOPA. Until 2009, Nick was Head of Global Payments at Vodafone Group, where he started MPESA in 2004. Nick has PhD in Applied Science, an MBA from London Business School, and received an Economist Innovation Award in 2010.

Jesse Moore, Managing Director, has more than ten years' experience building emerging market technology ventures. Prior to founding M-KOPA, Jesse was a founding director of the GSMA Development Fund. He holds an MBA from Oxford University (Skoll Scholar) and a BA from UNC Chapel Hill (Morehead Scholar).

Chad Larson, Finance Director, previously served as the CFO of Mecene Investment, the fund manager of the Africap Microfinance Investment Fund in Johannesburg. Chad is a CFA charter holder and has an MBA with distinction from Oxford University, as well as ten years investment banking experience at Bank of America.

11. How have the actions taken within your organisation inspired individuals and other organisations to address the challenges facing the renewable energy and sustainability industry? [Max 150 words]

The success of M-KOPA as the market leader in our category has inspired other pay as you go energy providers in East Africa.

The high rates of successful completion of the payment plan more than 95% has also inspired financial and other service providers to look anew at the low income market in East Africa. Our consumers have proved themselves 'credible' and they also now have a 'fixed' asset that can be easily re-leveraged to provide more life-changing products. These include insurance, cheap loans and potentially more technology products and agricultural inputs.

All these products can help improve sustainable financial and economic inclusion.



Other Relevant Points

12. Please tell us about any other aspects of your company, not covered above, that you feel are relevant to your candidacy for the Zayed Future Energy Prize [max 300 words]

Perhaps what is not explicitly said is that M-KOPA started out as a mobile technology and financing company. Renewable energy, specifically solar, has come to us as the right application or product for our mobile financing solution.

While this may be an unusual statement among Zayed Prize applicants, we believe it is important and exciting that professionals from adjacent industries are taking up renewable energy business models.

Given the success of mobile telephony and micro-finance, as business models that have both generated big impacts and big profits, we believe the advent of entrepreneurs like ourselves joining the energy sector is a positive force for growth.



C. Global High Schools - Munro Academy

Executive summary

- 1. First, tell us about your school. Please introduce yourselves to us, and include details such as the school's size, location, a brief history and any special focuses or mandates. [max 100 words]**

Munro Academy is an independent Pre-Primary to Grade 12 day school which provides 'positively life changing education' to students from beautiful Cape Breton Island in Eastern Canada. In addition to completing rigorous academic studies, Munro Academy students are challenged to make a difference in their world through life changing service trips, including teaching 'Google Apps' to staff at a deaf school in Belize and learning about the orphan response on site in Ethiopia. Munro Academy has experienced steady growth since its launch in 2009. We are slated to enter a newly renovated, energy efficient building this autumn.

- 2. How did you learn about the Zayed Future Energy Prize? [max 50 words]**

Online.

Impact - 30%

- 3. Project Description: Please describe the technical, tangible impact that the project will have. What tangible benefits will it produce? What data measurements and comparisons will you make in order to track the project's progress? Please describe any quantitative and qualitative objectives and targets, for example energy or emissions reduction. [max 250 words]**

SUMMARY: Munro Academy's ZFEP Project has a dual focus: 1) SOLAR AIR HEATING UNITS/GREEN BUSINESS INCUBATION:

Phase 1: students/staff construct a series of 10 'Solar Air Heating Collectors' utilizing recycled aluminium can heating cores and install in 10 classroom areas.

Phase 2: students/staff refine 'Solar Air Heating Collectors' for replication and sale in local area as an ongoing, small scale green business project, engaging students in a business initiative and providing a zero-emissions, locally appropriate supplemental residential heating alternative



Projected heat output: 1208 BTU/hour/unit in full sunlight (*10 units)

As a supplemental heating system, 10 units would decrease building heating load by approximately 25%+ on sunny days (for BTU estimate, see <http://www.builditsolar.com/Experimental/PopCanVsScreen/PopCanVsScreen.htm>)

2) PHOTOVOLTAIC SYSTEM: a grid-tied PV system installed on the roof of our school building to provide a portion of our electrical needs and decrease usage of local coal-based electrical power (grid-tie with Nova Scotia Power).

Projected annual output: 18410 kWh

Annual CO2 offset: 11.4 tons

Projected value of electricity produced in 1 year: \$2,623 (@14.251 cents/kWh); lifetime savings of \$116,947 BENEFITS:

Increase in residential usage of emissions-free supplemental heating system technology, currently not available in our area. Green business experience for students Generation of emissions free electrical energy for our school

SCHOOL'S TOTAL ENERGY CONSUMPTION: 12,000 square foot newly renovated 1956 school building with new biomass/wood-chip heating system currently using coal fired grid based electricity:

- Before: ~83% renewable (Biomass heating system=358,000 kWhr out of 428,000 kWhr total)
- After: ~92% renewable (with addition of PV and Solar-air-supplement)

4. Please describe the educational impact of the project. How will the project enhance the students' knowledge, understanding and skills? [max 200 words]

EDUCATION COMPLETED:

In partnership with Efficiency Nova Scotia's 'Green Schools' program, students have participated in an educational process gearing up for the Zayed Future Energy Prize, discussing global warming, energy (particularly electricity) production in Canada, our impact on the environment and what changes we can make, particularly in our newly renovated school building.



ONGOING EDUCATIONAL IMPACT:

- 1) SOLAR AIR HEATING UNITS/GREEN BUSINESS INCUBATION: -Students will gain technical expertise in building a series of 10 simple solar thermal heaters using recycled tin cans and local construction materials (plywood, plexiglass, paint, tubing, thermostat, etc.). -Students will gain amazing green business experience as they 1) refine a simple solar thermal heating product which they are able to produce (with staff support) and market as a residential zero-emissions supplemental heating alternative.
- 2) PHOTOVOLTAIC SYSTEM: ongoing student monitoring of functioning PV system including relationship with Nova Scotia Power.

5. Cost and Feasibility:

- a) **What will be the total cost of implementing the project, and how much of this will come from the Zayed Future Energy Prize? If the ZFEP is not likely to cover the full costs of the project, please indicate where the shortfall will come from, and the timeframe for when this will be secured.**
- b) **Please give an outline project plan with the cost and approximate duration of each of the main steps in the table below:**

Table 1: Project plan outline						Timing (Months)											
Task	Cost (US\$)	Description	Who does the work	Impact	Milestone	1	2	3	4	5	6	7	8	9	10	11	12
Solar heater construction	3000	Construction of 10 thermal solar heaters using recycled cans	Students Staff	Student technical/ trade learning	Completed solar thermal units	x	x	x									
Installation of Solar Heater Units	1000	Install 10 solar thermal units on outside walls of 10 classrooms	Students Staff	Student technical/ trade learning	Units installed and functioning				x								



- c) ***Please upload professional cost estimates from third party contractors or suppliers under the supporting documentation, along with any other important information. [additional documentation]***
- d) ***Finally, please comment on the feasibility of the project, and describe any steps you have taken to determine this. [max 300 words total + additional documentation]***

Feasibility: SOLAR AIR HEATING UNITS/GREEN BUSINESS INCUBATION: This the most innovative segment of our project - and at the same time is the segment for which feasibility/success is most difficult to predict. The following factors suggest positive feasibility/success potential:

- Student interest: our students proposed and have been pushing for the solar thermal heater concept - participant engagement corresponds with increased success rates.
- A local man in a neighbouring province with a similar climate has successfully launched a similar small scale business (<http://newenergyandfuel.com/http://newenergyandfuel.com/2011/09/06/the-best-thermalsolar-panel-might-be-the-cheapest/>)
- No such product/business is available locally (suggesting positive demand).
PHOTOVOLTAIC SYSTEM: PV technology has a long, consistent track-record.

Innovation – 20%

6. ***What problem does your project solve? What research have you done into alternative solutions (for example others in your country or area), and how did you decide on this one? [max 300 words]***

PROBLEMS SOLVED: Both segments of this project provide alternative solutions to decrease emissions and fossil fuel consumption. The SOLAR AIR HEATING UNITS/GREEN BUSINESS INCUBATION segment of the project provides a unique educational experience for students and the potential for green business start-up in a region marked by high unemployment.

ALTERNATIVE SOLUTIONS CONSIDERED: We have considered and rejected the following alternatives:



1. In-stream micro-hydro generation in adjoining stream: following consideration, this option was rejected due to low flow rate and lack of technical precedence for our specific situation (low flow rate, low stream level, freezing/thawing, tidal surge issues).
2. Wind generation on site:
We considered (based on technology suggested by students) a cutting edge horizontal, fixed roof-peak wind generation system given our location at the mouth of a harbour and potentially steady wind direction. This option was rejected due to structural concerns for mounting on the building. -We considered a larger conventional tower wind generator but are limited due to set-back regulations and safety concerns with students (ice-throw potential).

RESEARCH: In addition to student driven web based research and presentations, we have sought input from local engineers, Efficiency Nova Scotia 'Green Schools' and Cape Breton University's Verchuren Centre for Sustainability and the Environment.

RATIONALE FOR THIS PROJECT FOCUS: Through researching and processing various alternatives with staff, students and professional input, we have opted for a dual focus on

- 1) SOLAR AIR HEATING UNITS/GREEN BUSINESS INCUBATION and
- 2) PHOTOVOLTAIC SYSTEM

on the basis that this combination is relatively simple, allowing for a high level of student engagement and ownership; -locally appropriate for our climate and economy; replicable: potential for replication of solar air heating units spurring a local business start-up, potentially multiplying the impact of the project.

7. ***What are the particular attributes and strengths of your school, its location and the region, that will be used to make the project work effectively? How will the project use local resources cost-effectively and creatively? In addition to technical or geographical factors, feel free to describe any innovative external collaborations or partnerships you have that will be important in developing the project. [max 400 words]***



CREATIVE LOCAL RESOURCE USEAGE:

- The SOLAR AIR HEATING UNITS/GREEN BUSINESS INCUBATION segment of the project uses locally available recycled aluminium cans and wood products (plywood/wood framing, etc.) in support of local forestry production. Resulting solar thermal heating units provide a locally appropriate, highly needed residential heating alternative ideally suited for our Atlantic Ocean moderated winter climates.
- Both foci of this project rely on free, clean solar power.
- Both parts of this project draw on existing structure of our school building, with the PV system to be installed on the southern facing steel pitched roof and the solar air heating units to be installed on south/east exposure walls adjoining classrooms.

COLLABORATIVE PARTNERSHIPS: We are partnering with the following leading local experts: --Cape Breton University's Verschuren Centre for Sustainability and the Environment: a local leader in innovative and sustainable solutions to energy and environmental issues (see letter of support attached)

<http://www.verschurencentre.ca/>)

- Efficiency Nova Scotia 'Green Schools':
(see <http://greenschoolsns.ca/frontpagenews/green-blueprintsmunro-academy/>)
- Appleseed Energy Inc.: a local green energy product provider (see <http://www.appleseedenergy.com/> and quote attached to 'Costs & Feasibility' section.

Leadership – 20%

8. In what ways will students be engaged with the project? What will be the roles of staff and students in collaborating to run the project – in particular, how will staff provide support? [max 300 words]

- Students have been directly and deliberately engaged in (and excited about!) this project from the start. Students and staff will continue to work collaboratively in implementing this project, with students being directly involved in building and installing 10 solar air heating units, refining the solar unit design and seeking to



market the product locally. In addition, students will be involved in tracking PV system output and the connection to the grid-tie system.

- Staff will support students by processing design plans and purchase orders for materials with students; encouraging students in collecting recyclable aluminium cans, etc. This project is time-tabled into regular class period (currently slated during last period enrichment class). Staff will bring in a local carpenter to assist students in construction of 10 solar air heating units. Staff will continue to support students in refining solar air heating units and considering options for marketing and production. Staff will also facilitate student engagement with the PV system and dialogue with Nova Scotia Power as the grid-tie partner.

In short, the focus is on collaboration, with staff providing a supportive framework in which student creativity and entrepreneurship can thrive.

9. *What was the process you used to develop the project plan, and how were students involved in this process? How much of the final plan is the result of staff versus student input? [max 250 words]*

Students have been directly involved in researching and defining the focus for this project through a series of classes, student/staff discussions, and student led presentations. Students discussed, researched and proposed to their class innovative ideas for application at our school building. In particular, see Grade 7 student Alex Whyte's presentation on solar heating technology using locally available materials:

https://docs.google.com/presentation/d/14j6A1RPHWkWrQX_QMDYOkkBZvOjwoD5rCbr2-gFFkE4/pub?start=false&loop=false&delayms=3000

Connected to Alex's presentation, discussion pursuing the recycled aluminium can heating core option was decided upon. In addition, the PV system was suggested - and chosen - as a simple, proven technology to balance the more innovative, less conventional solar air heating unit segment of the project. Given in part that we are now on summer break, the writing of this project has been done by staff drawing on the wealth of student input.



Long-Term Vision - 30%

10. What is the school's long-term sustainability goal? In addition to the project mentioned, how are you working towards this, and what past achievements have you made? [max 250 words]

LONG TERM SUSTAINABILITY GOAL: A biomass heated facility with a net-zero draw from the electrical grid. ACHIEVEMENTS TOWARDS THIS GOAL: Munro Academy is in the final stages of completing a \$1.2 million renovation of a 12,000 square foot school building. In terms of efficiency and sustainability, a corner-stone of this project is a biomass (wood-chip) heating system. This heating system is locally appropriate (given our vibrant forestry industry and wood-chip byproducts). It is a major step forward from the current fossil fuel based options. In addition, in terms of operating costs, it is the most fiscally prudent of the option considered. Renovations have included insulation of building and installation of new, energy efficient windows resulting in major improvements in energy efficiency. A partnership with Efficiency Nova Scotia has been helpful in this process.

As noted above, with the biomass heating system, our facility is slated to achieve energy usage which is 83% renewable. Successful completion of the ZFEP project could boost this to 92%+.

11. In what way is the project expected to encourage responsible global citizenship and sustainability among students, staff, parents and the wider community? What steps will be taken to ensure this? [max 300 words]

This project has and will encourage a greater understanding amongst students of how our lifestyle and energy consumption choices impact others around the globe. The project will give students a direct, concrete avenue for being involved in meaningful, positive change both for our school building and for families in our community. As students refine, promote and produce zero-emissions solar thermal systems, they will be in the front-line of promoting a real option for change for our community.

12. Project continuity and management:

- a) How will you ensure the long-term continuity of the project, not just in terms of maintenance but in the engagement and commitment of student groups and the broader community? For example, has a permanent student committee been**



created to focus on sustainability initiatives? If so, what are its duties, and what has it done already? [max 250 words]

A core group of 5 students and 2 staff have been most directly committed to our Green School's initiative and preparation for the Zayed Future Energy prize. This group will comprise the ongoing core leadership in walking this project forward. Ongoing active participation in Efficiency Nova Scotia's 'Green School's program by Munro Academy will further serve to ensure long term school engagement in sustainability initiatives.

b) Please provide a list of people and responsibilities in the following table. [include relationship to the school, e.g. staff, student, parent, neighbour]

Name	Relationship to the school	Role
Douglas Beane	Principal	ZFEP Contact; Green School's
		Contact; Staff project facilitator
Leslie Donovan	HS Science, Math Teacher	Staff technical oversight for project
Gemma Whyte	Student	ZFEP Researcher
James Murphy	Student	ZFEP Researcher
Alex Whyte	Student	ZFEP Researcher
Christy Davis	Student	ZFEP Researcher
Abigail Quesnelle	Student	ZFEP Researcher



Submission Process

- 1) To start a submission, click on **Log-in**
- 2) Register and create an account
 - a. Enter username
 - b. Enter password
- 3) Answer all the questions in the form
 - a. If entry is **complete**, click **Submit**
 - i. You will receive an automated email confirming receipt of your submission and a copy of your entry
 - b. If entry is **incomplete**, click **Save**
 - i. You will receive a reminder to complete your submission. Please make sure to complete the form before the deadline.
- 4) Attachments:
 - a. File attachment: Maximum of 5 attachments are allowed
 - b. Size of attachment: Maximum file size of 7MB per attachment
 - c. Video attachment: All video formats will be accepted



Submission Process Video Tutorial

Please click on the below link to understand the submission process and how to use the online portal:

<http://www.zayedfutureenergyprize.com/en/application-process/submission-process-video-tutorial/>

Contact Information

- 1) For general inquiries: info@zayedfutureenergyprize.com
- 2) For technical support: techsupport@zayedfutureenergyprize.com



Terms and Conditions for Participation

A. Publicity

- Masdar reserves the right to publish details of the nominees, entrants, finalists and winners of the Prize on the Prize website and in other promotional and publicity material as it considers appropriate, including (without limitation) for the purpose of promoting Masdar and/or the World Future Energy Summit. By entering, entrants agree that they will be willing and available to participate in publicity and promotional activities and events and/or press conferences and that Masdar shall be entitled to use entrants' names, photographs, country of residence (but not full address) and other relevant information in publicity throughout all media free of charge.
- Entrants shall not take part (or agree to take part) in any media coverage, or make any press releases or other announcements regarding participation in the Prize without the prior agreement of Masdar. No entrant shall refer to the Prize or permit it to be referred to by any third party for the purpose of promoting or publicising any company or business other than Masdar.
- Notwithstanding the paragraph above, following the announcement of the Awards, the winner and runners-up may refer to the Prize and that they have been given the Award. If referring to the Prize or the Award for the purpose of promoting or publicising any company or business other than Masdar the winner or runners-up must get the consent of Masdar.
- Masdar may enter into discussions with the entrants regarding the potential publication of the submissions.

B. Submission Details

- The submission should be sufficiently detailed and clear to enable the judges to analyse properly and to form a view on all elements of the submission and the nominee.

C. Entries

- Entries will not be returned.
- Entrants may be required to provide further information to assist the judges in assessing the submission and each entrant agrees to fully co-operate with the judges. Information which is not in the public domain and is marked by the entrant as confidential shall be treated as confidential by Masdar and the judges, but each entrant is advised to take independent legal advice relating to the protection of any invention or know-how that is



included within the submission. Masdar shall not be responsible for maintaining the confidentiality of any information submitted over the Internet, but shall use reasonable efforts to keep such information confidential.

- The entrant warrants that it has truthfully and accurately completed the submission and acknowledges and agrees that Masdar may in its sole discretion disqualify the entrant from the Prize at any stage if the entrant has provided any untruthful, inaccurate or misleading details or information in the submission and/or has failed to abide by the terms and conditions of participation.
- The entrant warrants that it owns the intellectual property rights relating to the submission or has obtained any licences required to use the intellectual property rights relating to the submission.
- As between Masdar and the entrant, the entrant shall retain ownership of any intellectual property rights in its submission.
- Masdar, the selection committee or the judges (as the case may be) may decline to submit a nomination or consider a submission if, in the sole discretion of Masdar, the selection committee or the judges, the submission infringes the intellectual property rights of a third party. Any such decision shall be final and non-appealable.
- Any cash awards ("Awards") will be awarded at the sole discretion of the judges. The decision of the judges shall be final and non-appealable and no correspondence will be entered into. The judges will be under no obligation to provide any reasons for their decision.
- Masdar shall retain all nominations and submissions and may use such nominations and submissions at its discretion to analyse the success and future of the Prize.

D. Selection Committee

- Selection of top entries will be undertaken by the selection committee to be put forward for consideration by the judges.
- The finalists will be selected based on stringent judging criteria.
- The selection committee reserves the right to take external advice and guidance from such other experts as they consider appropriate, including but not limited to advice relating to the originality of the submission and whether the submission infringes the intellectual property rights of a third party.
- No member of the selection committee shall (a) have personal or financial interests in, or be an employee, officer, director, or agent of any entity that is a registered participant in the Prize (or sponsor or financier of any such participant); or (b) have a familial or financial relationship with an individual who is a registered participant or participant sponsor.



E. Evaluation Committee

- Judging of all submissions will be conducted by a highly respected international panel of judges (provided that if any judge shall be unable to judge the entries, such judge(s) may be replaced by an alternate judge(s) selected by agreement of the remaining judges).
- The evaluation committee reserves the right to take external advice and guidance from such other experts as they consider appropriate, including but not limited to advice relating to the originality of the submission and whether the submission infringes the intellectual property rights of a third party.
- No member of the evaluation committee shall (a) have personal or financial interests in, or be an employee, officer, director, or agent of any entity that is a registered participant in the Prize (or sponsor or financier of any such participant); or (b) have a familial or financial relationship with an individual who is a registered participant or participant sponsor.
- If the judges consider that the criteria have been met and that one or more of the finalists should win some or all of the prize pool, Awards will be awarded and the winners will be announced by Masdar in accordance with the Guidelines.
- The evaluation committee will be under no obligation to declare a winner or winners or make any award. As set out above, the committees' decision shall be final and non-appealable.

F. The Award

- The fund allocation per category is as follows:
 - Large Corporation: No monetary value (Recognition Award)
 - SME: US\$ 1,500,000
 - Non-Profit Organization (NPO/NGO): US\$ 1,500,000
 - Lifetime Achievement for an Individual: US \$500,000
 - Global High School (International): US \$500,000 (Divided amongst 5 Global High Schools in 5 different regions, awarding each up to US\$ 100,000)
 - The Americas
 - Europe
 - Africa
 - Oceania
 - Asia
- There is no alternative to the cash Award.
- The Awards shall be used by the winners per category to further the ideas and ambitions within the winning submissions.



- An Award may be subject to withholding tax (if applicable) and/or income tax or other applicable tax which shall be payable by the winner or the runners-up as applicable. Masdar shall not be liable for any taxes which are or become payable on the Award.
- An Award may be revoked and a refund required if it is discovered that a winner has provided misleading or erroneous information within the submission or it is subsequently discovered that the submission infringes the intellectual property rights of a third party.

G. Eligibility

- The Zayed Future Energy Prize is open to all entrants other than:
 - (a) board members and employees of Masdar; and
 - (b) anyone who has been involved in organising, promoting or judging the Prize.
- Masdar, the selection committee and the judges reserve the right and have full discretion to reject or not select any nomination or submission for any reason that may, in the sole opinion of the select committee, the judges or Masdar, damage the reputation of the Prize, the UAE, Abu Dhabi or Masdar or bring the Prize, the UAE, Abu Dhabi or Masdar into disrepute. The decision of the selection committee, the judges or Masdar shall be final and no correspondence shall be entered into.

H. Masdar's Liability

- Masdar accepts no liability for entries lost, damaged or delayed in transmission and proof of submitting an entry is not proof of receipt.

I. Important information

- Masdar reserves the right to modify the Guidelines and these Terms and Conditions of Participation as necessary during the term of the challenge. Masdar will update registered entrants or related parties as appropriate as to any such modifications.
- In registering to enter the Prize, each entrant does not rely on, has not relied on, and shall have no remedy in respect of, any statement, representation, warranty or other provision (in any case whether oral or written, express or implied and whether negligently or innocently made) of any person which is not expressly set out in the Guidelines and/or these Terms and Conditions of Participation.
- Masdar shall be free to assign, transfer, sub-license or otherwise dispose of or deal with its rights under the Guidelines and/or these Terms and Conditions of Participation.
- The Prize shall be governed by the Guidelines and these Terms and Conditions of Participation.



J. Governing Law

- The Guidelines and the Terms and Conditions of Participation are governed by and interpreted in accordance with the laws of Abu Dhabi.
- The courts of the UAE have exclusive jurisdiction to settle any disputes which may arise in connection with the Guidelines and Terms and Conditions of Participation.

K. Confidentiality

Masdar acknowledges that as part of the application process, entrants may be requested to disclose confidential or sensitive information in their submissions. Masdar undertakes to handle any such information submitted – including any financial information pertaining to the applicants – with the strictest of confidence and will only ever disclose such information to members of the selection committee and the panel of judges.