SDG7 Energy Compact of ZIPOLPOLO COOKSTOVE SOLUTIONS

A next Decade Action Agenda to advance SDG7 on sustainable energy for all, in line with the goals of the Paris Agreement on Climate Change

SECTION 1: AMBITION

1.1. Ambitions to achieve SDG7 by 2030. [Please select all that apply, and make sure to state the baseline of each target]

(Member States targets could be based on their NDCs, energy policies, national five-year plans etc. targets for companies/organizations could be based on their corporate strategy)

<table>
<thead>
<tr>
<th>☐ 7.1. By 2030, ensure universal access to affordable, reliable and modern energy services.</th>
<th>Target(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>To mainstream an affordable pellet cookstove that uses sustainably produced pellet fuel (made from human food agricultural waste).</td>
</tr>
<tr>
<td>☐</td>
<td>Presently, there is no mainstream pellet cookstove in Malawi.</td>
</tr>
<tr>
<td>☐</td>
<td>While still better than traditional charcoal stoves concerning indoor air pollution, this compact is less about improved indoor air pollution, but more about a total cookstove solution that sequesters carbon when compared with a meal cooked on a charcoal stove and a meal cooked on a pellet stove.</td>
</tr>
<tr>
<td>Time frame:</td>
<td>● 2021 to 2030</td>
</tr>
<tr>
<td>Context for the ambition(s):</td>
<td>● The majority (96% of families) of fire based cookstoves in Malawi use unsustainable / illegal charcoal and wood. These stoves are:</td>
</tr>
<tr>
<td></td>
<td>○ Wood - 3 Stone Stove</td>
</tr>
<tr>
<td></td>
<td>○ Wood - Chitetezo Mbula</td>
</tr>
<tr>
<td></td>
<td>○ Charcoal - Jiko Style Mbula</td>
</tr>
<tr>
<td>☐</td>
<td>The ambition is to provide an alternative and suitable stove that uses legal and sustainable fuel, instead of illegal / unsustainably sourced charcoal and wood fuel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>☐ 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.</th>
<th>Target(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>To mainstream affordable pellet fuel made from sustainable and annually grown human food agricultural waste</td>
</tr>
<tr>
<td>☐</td>
<td>Presently, there is no mainstream pellet fuel in Malawi.</td>
</tr>
<tr>
<td>☐</td>
<td>While still better than traditional charcoal fuel concerning indoor air pollution, this compact is less about improved indoor air pollution, but more about a total cookstove solution that sequesters carbon when compared with a meal cooked with charcoal fuel and a meal cooked with pellet fuel.</td>
</tr>
<tr>
<td>Time frame:</td>
<td>● 2021 until 2030</td>
</tr>
<tr>
<td>Context for the ambition(s):</td>
<td>● 96% of Malawi’s energy for cooking and heating comes from illegal / unsustainable wood and charcoal</td>
</tr>
<tr>
<td>☐</td>
<td>The ambition is to provide an alternative fuel as a suitable replacement for illegal / unsustainably sourced charcoal and wood fuel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>☐ 7.3. By 2030, double the global rate of improvement in energy efficiency.</th>
<th>Target(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time frame:</td>
<td>Context for the ambition(s):</td>
</tr>
</tbody>
</table>
7.a. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.

- **Target(s):**
- **Time frame:**
- **Context for the ambition(s):**

7.b. By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programs of support.

- **Target(s):**
- **Time frame:**
- **Context for the ambition(s):**

1.2. Other ambitions in support of SDG7 by 2030 and net-zero emissions by 2050. **[Please describe below e.g., coal phase out or reforming fossil fuel subsidies etc.]**

- **Target(s):**
  - Same as 7.1 and 7.2 above
- **Time frame:**
  - Same as 7.1 and 7.2 above
- **Context for the ambition(s):**
  - Same as 7.1 and 7.2 above

### SECTION 2: ACTIONS TO ACHIEVE THE AMBITION

2.1. Please add at least one key action for each of the elaborated ambition(s) from section 1. **[Please add rows as needed].**

<table>
<thead>
<tr>
<th>Description of action (please specify for which ambition from Section 1)</th>
<th>Start and end date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and produce a cookstove, that financially competes with existing cookstoves that use illegal / unsustainable wood and charcoal</td>
<td>Already started &amp; ending 2030</td>
</tr>
<tr>
<td>Produce pellets, for this cookstove, made from annually grown agricultural human food waste (maize stalks and husks, groundnut shells, rice husks, etc)</td>
<td>Already started and ending 2030</td>
</tr>
</tbody>
</table>

- **Description of action (please specify for which ambition from Section 1):**
- **Start and end date:**
SECTION 3: OUTCOMES

3.1. Please add at least one measurable and time-based outcome for each of the actions from section 2. [Please add rows as needed].

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based upon 2 cooking sessions per day per stove (450g pellet fuel):</td>
<td></td>
</tr>
<tr>
<td>● Fuel Pellets</td>
<td></td>
</tr>
<tr>
<td>○ Year 2021 to 2021 – 10,000 kg total sales</td>
<td></td>
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<tr>
<td>○ Year 2022 to 2030 – 540,000 kg total sales</td>
<td></td>
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<tr>
<td>● Pellet Stoves</td>
<td></td>
</tr>
<tr>
<td>○ Year 2021 to 2022 – 61 stoves total sales</td>
<td></td>
</tr>
<tr>
<td>○ Year 2021 to 2030 – 3,349 stoves total sales</td>
<td></td>
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<tr>
<td>○ Starting with 61 stoves in 2021 and doubling every year till 2030</td>
<td></td>
</tr>
<tr>
<td>■ 2021 = 61 stoves, 2022 = 122 stoves, 2023 = 183 stoves … 2030 total = 3,349 stoves</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4: REQUIRED RESOURCES AND SUPPORT

4.1. Please specify required finance and investments for each of the actions in section 2.

- Services – National media campaign to promote the cookstove solution @ US$1,500 per month from now until 2030 – approx. 108 months = US$162,000
- Finance – To buy and store 550 tons of pellets over a 9 year period – US$ 1.23 million
- Zipolopolo Cookstoves Solutions has made the investment of:
  - Responding to the global call to provide solutions to reduce GHG emissions that are affecting climate change
  - Designing the cookstove, training local manufacturers how to make it (it is not a copy, it is an original) and already selling the first approx 100 units during 2021 as a proof of concept
  - Establishing a pellet fuel supply chain from the farms (raw material) to the pelletiser (end product)
  - Establishing a cookstove supply chain using local market vendors
- To mainstream both the cookstove and the pellet fuel, Zipolopolo Cookstove Solutions needs investment for marketing and pellet fuel

4.2. [For countries only] In case support is required for the actions in section 2, please select from below and describe the required support and specify for which action.

[Examples of support for Member States could include: Access to low-cost affordable debt through strategic de-risking instruments, capacity building in data collection; development of integrated energy plans and energy transition pathways; technical assistance, etc.]

<table>
<thead>
<tr>
<th>Financing</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Kind contribution</td>
<td>Description</td>
</tr>
<tr>
<td>Technical Support</td>
<td>Description</td>
</tr>
<tr>
<td>Other/Please specify</td>
<td>Description</td>
</tr>
</tbody>
</table>

SECTION 5: IMPACT
5.1. Countries planned for implementation including the number of people potentially impacted.

Malawi
- 3,349 Zipolopolo Pellet Stoves x average Malawi household size of 4.4 = 14,734 impacted people.
- 1 Zipolopolo Pellet fuel bag of 225 g has the firepower to cook a meal for 4 to 6 people (see video on how it is done - https://youtu.be/7uHPID4J3Q)

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how each of the actions from section 2 impact advancing the SDGs by 2030. [up to 500 words, please upload supporting strategy documents as needed]

Malawi
- SDG 7.1
  - Provide an affordable and sustainable end to end solution (biomass pellet based cookstove appliance and fuel service)
  - This urban / peri urban market segment is very price sensitive. Both the pellet stove and the pellet fuel compete favourably with wood/charcoal stoves and wood/charcoal fuel
    - **Stove Costs**
      - Zipolopolo pellet stove retails for K5,000 (approx US$5.90)
      - Jiko style charcoal stove retails for about K4,500 (approx US$5.30)
      - Chitetezo mbaula wood stove retails for about K3,500 (approx US$4.10)
    - **Fuel Costs**
      - Legal and sustainable Zipolopolo pellet fuel retails for US$525 per ton
      - Legal and sustainable charcoal fuel retails for about US$730 per ton
      - Illegal and unsustainable charcoal fuel (17% of Malawi households) retails for about US$1,180 per ton
      - Illegal and unsustainable wood fuel (79% of Malawi households) retails for about US$100 per ton
  - 2018 census showed about 4 million households in Malawi

- SDG 7.2
  - Invest further into the biomass waste supply chain to produce more pellet fuel by leveraging the need to convert 96% of Malawian cookstove families from unsustainable / illegal wood and charcoal fuels
  - This biomass waste is sourced from farms producing food for human consumption
  - **Sources**
    - Malawi census 2018
    - UKAID / USAID MCHF Project

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how each of the actions from section 2 align with the Paris Agreement and national NDCs (if applicable) and support the net-zero emissions by 2050. [up to 500 words, please upload supporting strategy documents as needed]

Malawi
In Malawi, you cannot have pellet fuel biomass “access to affordable, reliable, sustainable and modern energy for all” if the raw material cannot be grown due to:
- No rain
- Too much rain
- Poor soil
- Excessive heat

And, for this reason, the negative effects of climate change are very significant to achieve SDG 7 goals from a biomass perspective, as our pellet fuel biomass is agriculturally produced human food farm waste (Malawi NDC Report - July 2021 - Page 9 / Section “Malawi’s Climate Change Response”).

We have placed a lot of emphasis on the GHG emission suitability of the Zipolopolo Cookstove initiative as a GHG mitigation tool toward climate change.

3,349** stoves x average tree saving of 11 small to medium hardwood trees per stove used twice per day = 36,834 trees saved per year (not cut down for wood/charcoal stove use)

**Workings**
• Average charcoal use, using a charcoal stove, per meal is 200 g x 2 meals per day = 400 g x 365 days = 146 kg.
• Village style (earth kilns) wood to charcoal conversion rate is about 10:1 (10 kg wood makes about 1 kg charcoal)
• Therefore, 146 kg of charcoal requires 1,460 kg of dry tree.
• A live tree is about 35% water (excluding roots - or about 50% with roots); therefore 1,460 kg dry tree is about 2,246 kg of live tree.
• 2,246 kg of live tree is about 11 small to medium mature hardwood trees.

** at year end 2030

Paris Agreement Alignment - Nett Zero by 2050 - Malawi

- **Trees**
  - One mature small to medium forest hardwood tree that is cut down for charcoal would have absorbed about 21 kg of CO2 per year.
  - Therefore, one tree saved from being cut down will absorb about 21 kg CO2 per year.
  - If one pellet cookstove replaces one charcoal cookstove, then the Zipolopolo pellet cookstove project (of 3,349 stoves by 2030) can save the need to cut down 36,834 trees (otherwise used for wood or charcoal cookstove use).
  - 36,834 trees will absorb about 774 tCO2.

- **Charcoal**
  - Almost all household cookstove charcoal in Malawi is from illegal and / or unsustainable natural hardwood forest sources.
  - About 2.7 kg of CO2 is emitted when combusting 1 kg of charcoal (including the production of charcoal).
  - 1 stove using an average of 400 g charcoal per day (2 cooking sessions) will use about (0.40 kg x 365 days) 146 kg charcoal per year.
  - If about 2.7 kg of CO2 is emitted when combusting 1 kg of charcoal (including the production of charcoal), then each stove will emit about 394 kg CO2 per year x 3,349 stoves per year = 1,320 tCO2 / year.

- **Pellets**
  - Our pellets are made from annually grown dried agricultural human food waste, such as maize, rice, groundnuts, etc. This food will be grown whether we like it or not, so we may as well use the biomass waste as cookstove fuel.
  - About 50% of the dry mass of biomass is carbon.
  - 1 stove using an average of 450 g pellets per day (2 cooking sessions) will use about (0.45 kg x 365 days) 164 kg pellets per year.
  - If about 50% is carbon, then each stove will emit about 82 kg per year x 3,349 stoves per year = 275 tCO2 / year.

Therefore

- Based on 3,349 pellet stoves replacing 3,349 charcoal stoves by 2030, we can calculate:
  - Charcoal Stoves
    - 774 tCO2 NOT absorbed due to tree cutting + 1,320 tCO2s = 2,094 tCO2 emitted into the atmosphere per year
  - Pellet Stoves
    - 774 tCO2 absorbed due to NO tree cutting + 275 tCO2 of pellet stove emissions = 499 tCO2 NOT emitted (negative) into the atmosphere per year (this excludes additional CO2 absorption from the annual crop when growing in the field)
  - Therefore
    - 1 x charcoal stove produces 0.62 tCO2 per year
    - 1 x pellet stove removes 0.15 tCO2 per year (assuming 1 charcoal stove is replaced by 1 pellet stove)
    - Or, 1 x pellet stove produces 0.082 tCO2 per year (assuming 1 pellet stove is used simultaneously with 1 charcoal stove)

- **Nett Reduction in CO2**
  - Unlicenced charcoal production and distribution is illegal in Malawi (although not enforced).
  - If enforced, or voluntarily, and 1 charcoal stove is replaced by 1 pellet stove, then:
- 3,349 pellet stoves will remove 499 tons of someone else's CO2 / year (better than nett zero - carbon sequestration tool)
- 3,349 pellet stoves will save 2,094 tCO2 / year from being emitted by charcoal cookstoves
- 3,349 pellet stoves will have a total CO2 reduction 2,593 tons per year

- Financing
  - Total funds requested for this project is US$1,392,000.
  - 3,349 cookstoves used twice per day = 6,698 cooking sessions per year (1 pellet stove cooking session feeds 4 to 6 people).
    - Using charcoal, this will emit 2,094 tCO2 per year.
    - Using pellets, this will remove 499 tCO2 per year (compared to the charcoal stove equivalent)
  - Funds requested for this project to be nett zero = US$1,392,000 / 2,094 tCO2 = US$665 per ton.
  - Funds requested for this project to be 499 tCO2 below nett zero = US$1,392,000 / 2,593 tCO2 = US$537.00 per ton.

- Malawi NDC's
  - As per Malawi’s updated NDC of July 2021 (see below), if all identified measures were funded by 2040, emission reductions are estimated at 51% at an expected cost of US$46 billion (excluding FOLU).
  - Malawi's GHG emissions were estimated in 2017 to be 9.33 million tCO2.
  - Malawi’s GHG emissions are estimated in 2040 to be 34.6 million tCO2.
  - A 51% reduction of 17.7 million tCO2 by 2040, at a cost of US$46 billion.
  - This equates to a cost of US$2,599 per ton (for a 51% reduction)
    - Analysis
      - Much higher than the cost of the Zipolopolo Cookstove solution
      - The Zipolopolo Cookstove solution exceeds nett zero to become a carbon sequestrator solution

- Sources
  - USDA, USA - Water in tree’s
    - [https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5269813.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5269813.pdf)
  - Wood to charcoal conversion rates + Average Charcoal Consumption + CO2 in Charcoal Production
    - [https://energypedia.info/wiki/Cooking_with_Charcoal](https://energypedia.info/wiki/Cooking_with_Charcoal)
  - CO2 Absorption per Tree
    - [https://www.usda.gov/media/blog/2015/03/17/power-one-tree-very-air-we-breathe](https://www.usda.gov/media/blog/2015/03/17/power-one-tree-very-air-we-breathe)
  - Carbon in Charcoal
    - [https://www.fao.org/3/X5328E/x5328e0b.htm#:~:text=The%20fixed%20carbon%20content%20of,charcoal%20consists%20mainly%20of%20carbon](https://www.fao.org/3/X5328E/x5328e0b.htm)
  - CO2 emitted when Burning Charcoal + CO2 in Charcoal Production
  - CO2 Emissions for Various Fuels
    - [https://www.volker-quaschning.de/datserv/CO2-spez/index_e.php](https://www.volker-quaschning.de/datserv/CO2-spez/index_e.php)
<table>
<thead>
<tr>
<th>USD million</th>
<th>2020-2025</th>
<th>2025-2030</th>
<th>2030-2040</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mitigation measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unconditional contribution</td>
<td>1,664</td>
<td>1,949</td>
<td>5,362</td>
<td>8,974</td>
</tr>
<tr>
<td>Conditional contribution</td>
<td>2,550</td>
<td>5,393</td>
<td>24,866</td>
<td>32,808</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,213</td>
<td>7,341</td>
<td>30,228</td>
<td>41,782</td>
</tr>
<tr>
<td><strong>Adaptation measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unconditional contribution</td>
<td>573</td>
<td>738</td>
<td>817</td>
<td>2,128</td>
</tr>
<tr>
<td>Conditional contribution</td>
<td>656</td>
<td>818</td>
<td>945</td>
<td>2,419</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,230</td>
<td>1,556</td>
<td>1,762</td>
<td>4,547</td>
</tr>
<tr>
<td><strong>Combined total</strong></td>
<td>5,443</td>
<td>8,897</td>
<td>31,990</td>
<td>46,329</td>
</tr>
</tbody>
</table>
GHG emissions profile (Baseline)

**Contribution of emissions sources:**

- **Agriculture 54%**: livestock represents largest share (CH₄ and N₂O) followed by emissions from managed agricultural soils (N₂O)
- **Energy 25%**: Energy use in buildings for cooking, lighting, heating and cooling (LPG, diesel, kerosene); transport fuels (diesel, gasoline), energy industries (power; charcoal), and fugitive emissions
- **Waste 18%**: solid waste disposal at unmanaged dumpsites (CH₄); open burning, and waste water treatment (N₂O)
- **IPPU 3%**: mainly calcination CO₂ from clinker within cement plants, and lime production

Total: 9.3 MtCO₂e

Source data: Malawi GHG, TNC, EC, 2020 and UNDP, 2020
GHG Mitigation Goals

- Malawi’s GHG emissions are currently among the lowest worldwide
- Under BAU scenario, emissions are forecast to increase by more than three times by 2040
- Energy use is expected to be the largest driver followed by waste generation, livestock and crop management.
- Analyses of Malawi’s mitigation potential shows that projected emissions could be reduced by around 50 per cent (50%) by 2040 if all identified measures were funded.
- Energy sector account for the largest share of total potential at 85%, followed by agriculture (9%), waste (5%), and IPPU (1%)

- Much of Malawi’s mitigation potential could be achieved at relatively low cost (<$30/tCO₂e)
- Approximately 216,000 new green jobs could be created associated with successful implementation of the identified measures.

SECTION 6: MONITORING AND REPORTING

6.1. Please describe how you intend to track the progress of the proposed outcomes in section 3. Please also describe if you intend to use other existing reporting frameworks to track progress on the proposed outcomes.

- Sales of stoves and pellets are tracked using our own database.
- For user identification, we use the Malawi national ID system.
- We are not aware of other reporting frameworks but are happy to consider using them.
Please use the checklist below to validate that the proposed Energy Compact is aligned with the guiding principles.

I. Stepping up ambition and accelerating action - Increase contribution of and accelerate the implementation of the SDG7 targets in support of the 2030 Agenda for Sustainable Development for Paris Agreement. 
I. 1. Does the Energy Compact strengthen and/or add a target, commitment, policy, action related to SDG7 and its linkages to the other SDGs that results in a higher cumulative impact compared to existing frameworks? ☒ Yes ☐ No
I. 2. Does the Energy Compact increase the geographical and/or sectoral coverage of SDG7 related efforts? ☐ Yes ☒ No
I. 3. Does the Energy Compact consider inclusion of key priority issues towards achieving SDG7 by 2030 and the net-zero emission goal of the Paris Agreement by 2050 - as defined by latest global analysis and data including the outcome of the Technical Working Groups? ☒ Yes ☐ No

II. Alignment with the 2030 agenda on Sustainable Development Goals – Ensure coherence and alignment with SDG implementation plans and strategies by 2030 as well as national development plans and priorities. 
II.1. Has the Energy Compact considered enabling actions of SDG7 to reach the other sustainable development goals by 2030? ☒ Yes ☐ No
II.2. Does the Energy Compact align with national, sectoral, and/or sub-national sustainable development strategies/plans, including SDG implementation plans/roadmaps? ☒ Yes ☐ No
II.3. Has the Energy Compact considered a timeframe in line with the Decade of Action? ☒ Yes ☐ No

III. Alignment with Paris Agreement and net-zero by 2050 - Ensure coherence and alignment with the Nationally Determined Contributions, long term net zero emission strategies. 
III.1. Has the Energy Compact considered a timeframe in line with the net-zero goal of the Paris Agreement by 2050? ☒ Yes ☐ No
III.2. Has the Energy Compact considered energy-related targets and information in the updated/enhanced NDCs? ☒ Yes ☐ No
III.3. Has the Energy Compact considered alignment with reaching the net-zero emissions goal set by many countries by 2050? ☒ Yes ☐ No

IV. Leaving no one behind, strengthening inclusion, interlinkages, and synergies - Enabling the achievement of SDGs and just transition by reflecting interlinkages with other SDGs.
IV.1. Does the Energy Compact include socio-economic impacts of measures being considered? ☒ Yes ☐ No
IV.2. Does the Energy Compact identify steps towards an inclusive, just energy transition? ☒ Yes ☐ No
IV.3. Does the Energy Compact consider measures that address the needs of the most vulnerable groups (e.g. those impacted the most by energy transitions, lack of energy access)? ☒ Yes ☐ No

V. Feasibility and Robustness - Commitments and measures are technically sound, feasible, and verifiable based a set of objectives with specific performance indicators, baselines, targets and data sources as needed. 
V.1. Is the information included in the Energy Compact based on updated quality data and sectoral assessments, with clear and transparent methodologies related to the proposed measures? ☒ Yes ☐ No
V.2. Has the Energy Compact considered inclusion of a set of SMART (specific, measurable, achievable, resource-based and time based) objectives? ☒ Yes ☐ No
V.3. Has the Energy Compact considered issues related to means of implementation to ensure feasibility of measures proposed (e.g. cost and financing strategy, technical assistant needs and partnerships, policy and regulatory gaps, data and technology)? ☒ Yes ☐ No

SECTION 8: ENERGY COMPACT GENERAL INFORMATION

8.1. Title/name of the Energy Compact

Zipolopolo Cookstove Solutions

8.2. Lead entity name (for joint Energy Compacts please list all parties and include, in parenthesis, its entity type, using entity type from below)

AIATECH
8.3. Lead entity type
☐ Government
☐ Non-Governmental Organization (NGO)
☒ Private Sector
☐ Local/Regional Government
☐ Civil Society organization/Youth
☐ Philanthropic Organization
☐ Multilateral body /Intergovernmental Organization
☐ Academic Institution /Scientific Community
☐ Other relevant actor

8.4 Contact Information
Marcel Blankenstein – marcel.blankenstein@gmail.com – 265 999 821 959

8.5. Please select the geographical coverage of the Energy Compact
☒ Africa ☐ Asia and Pacific ☐ Europe ☐ Latin America and Caribbean ☐ North America ☐ West Asia ☐ Global

8.6. Please select the Energy Compact thematic focus area(s)
☐ Energy Access ☒ Energy Transition ☒ Enabling SDGs through inclusive just Energy Transitions ☐ Innovation, Technology and Data ☐ Finance and Investment.

SECTION 9: ADDITIONAL INFORMATION (IF REQUIRED)
Please provide additional website link(s) on your Energy Compact, which may contain relevant key documents, photos, short video clips etc.

Zipolopolo "FAST" Cookstove - Introduction
Zipolopolo "FAST" Cookstove - Small Fuel Bag
Zipolopolo "FAST" Cookstove - Cellphone Battery Hack
Zipolopolo "FAST" Cookstove - Large Fuel Bag
Zipolopolo "FAST" Cookstove - Removing the Ash
Zipolopolo "FAST" Cookstove - Multiple Power Supplies
Zipolopolo "FAST" Cookstove - Cookbook Ver 28.08.2021
Zipolopolo "FAST" Cookstove - Multiple Stoves, One Power Supply
Zipolopolo "FAST" Cookstove - Charcoal Price is Hurting
Zipolopolo "FAST" Cookstove - Recycled Paper as Fuel
Zipolopolo "FAST" Cookstove - Chicken Stew Recipe
Zipolopolo "FAST" Cookstove - Meal for 4 to 6 People in 26 Minutes
Zipolopolo "FAST" Cookstove - Disaster Management and Preparedness
Zipolopo 'FAST' Cookstove - COP26, Storm Water and Tree's

Zipolopo 'FAST' Cookstove - Stop Promoting Tree Cutting