Here are my top 5 ideas for the funding programme to address open burning. Waste management in rural and remote areas is in a bad state, and a lot of open burning happens there. But given the limited scope of this programme (time-wise), I believe safety for more people can be improved via projects in densely populated areas. There tends to be more e-waste, plastic, medical and C&D waste in densely populated areas, compared to rural areas. Emissions from open burning create a denser smog in densely populated areas and take longer to disperse.

1. **Focus on e-waste.** Revamp one hotspot for e-waste recycling via open burning (e.g. Agbogbloshie in Ghana) - build infrastructure for e-waste recycling there, train local people to use it; set up an R&D lab (i.e. shed) where people with engineering talent can develop new low-cost technologies for e-waste recycling. During the project the air quality will improve dramatically and the number of accidents will decrease. There is a high chance that the people will not go back to open burning because they will experience the benefits of doing things differently and because their incomes will increase from selling more and higher quality recyclables.

   Open burning of e-waste produces much more toxic air pollution than open burning of MSW or plastic waste (plastics in e-waste are usually thermosets, containing a lot of harmful additives like fire retardants). There are a lot of efforts to reduce the amount of plastic waste, while this is not the case for e-waste. E-waste arrives from HICs to LIMICs where labour costs are orders of magnitude lower, this will keep happening legally or illegally. Rather than trying to prevent this, an opportunity can be created - a new profitable and environmentally friendly industry in Ghana. This will also attract more e-waste to Ghana and thus reduce the flow of e-waste to other countries where it would have been recycled via open burning. Please note, I only used Ghana as an example. This could be done in any other hotspot for e-waste recycling via open burning. This project will show the amount of impact that can be delivered given a certain budget. If successful, it would make it easy to attract more funding to revamp more hotspots.

2. **Focus on large-scale burning of waste.** Build a landfill (or an MBT plant, or a waste-to-energy plant) in a large densely populated area where open burning of waste is prevalent, for example Lagos. This will provide an environmentally friendly alternative for 22 million people. If bio waste is diverted from the landfill (for AD or composting), then a cheap landfill without methane capture could be built. I am currently working with LAWMA (Lagos State Waste Management Authority) and they are very open to change; all of their dumpsites are getting full and they have no other infrastructure for waste disposal.

   Lagos is projected to grow exponentially (some predictions say it might reach 200 million people in several decades), so this kind of project would contribute to preventing future intensification of open burning too. Again, Lagos is just an example. This could be done in any big and growing city which doesn't have any large-scale waste disposal infrastructure yet.

3. **Focus on medical waste.** Install small scale pyrolysis or gasification devices in several large hospitals in LIMICs. I know about several environmentally friendly options with capacity of 4 to 12 tonnes a day. This will allow the hospitals to dispose of their own waste safely, without relying on services that could be expensive or illicit, and without resorting to open burning.

   Medical waste poses a danger to the informal sector collecting it to sell for reuse, the informal sector collecting recyclables in dumpsites containing medical waste and the people who get medical attention with these reused medical supplies. It can also contaminate ground water with pathogens and contribute to global antibiotic resistance. Hence this project has a potential to improve safety for many people. This project will show the amount of impact that can be delivered given a certain budget. If successful, it would make it easy to attract more funding to help more hospitals.

4. **Focus on waste pickers.** Pick one country/region and provide all waste pickers and their kids with IDs. These could be physical cards or digital IDs using MOSIP (Modular Open Source Identity Platform https://www.mosip.io/index.php). Most waste pickers currently don't have IDs. This contributes to making it harder for them to get a different job. It usually prevents them from taking ferries, trains or long distance busses. Having IDs will empower the waste pickers to build a better future for themselves and ensure that their kids do not become waste pickers.

   It has been suggested during the workshop that "ensuring livelihoods of waste pickers has to be a priority". My suggestion is to prioritise enabling them (and most importantly their kids) to have a different future instead of a safer future in the informal waste sector. Existing waste pickers could be the last generation.

5. **Focus on dumpsites.** Identify one or several dumpsites that pose the most danger in terms of proximity to settlements, potential for slope failure and spontaneous ignition. Build an MRF (shed with basic technology like conveyor belts) there for processing the new incoming waste and the waste already in the dumpsite. Plastic waste can be recycled into fuel (I know a company that does this in a landfill in Bangkok), high calorific value waste can be sold as RDFs, recyclables can be sold in bulk.

   Dumpsite(s) could be picked using existing information available through ISWA, or identified using satellite data (should be easy to do using satellite data of known dumpsites for training). Companies like Studio Mapp https://www.studiomapp.com/en/ might be willing to help for free. This project will show the amount of impact that can be delivered given a certain budget. If successful, it would make it easy to attract more funding to do this in other locations.