Championing a landscape changing idea

Pleased to note that our championing has led to a 8 year programme (£40m) funded by UK Aid (FCDO), which is part of the Ayrton Fund.. The work focuses on modern energy cooking services, which incorporates the eCook ideas, and includes a systematic intention to change the narrative on cooking. The programme launched in Oct 2018, find it at www.mecs.org.uk

In May 2013 we presented a concept note to FCDO (then DFID) that argued that research should be conducted now, with the intention of creating an affordable solar electric cooking product to be rolled out at scale in Africa starting 2020. We continue on that path, but increasingly realise that it is a landscape changing idea, with implications at many levels and could strongly contribute to fulfilling SDG7. As noted above, we are now pleased to report , that there is a substantial programme taking this forward www.mecs.org.uk

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In brief the proposition started with the idea that if the current trends in price reductions in Solar photovoltaic technology and in energy storage (specifically Lithium Ion Phosphate batteries) continued, then by about 2020 a solar home system sized for cooking would have a comparable lifetime monthly cost to purchased biomass (mainly charcoal) alternatives for a sizeable proportion of the current biomass market.

In late 2015, DFID commissioned independent research on the proposition, to explore three key research questions - an economic model to confirm the trends and financial assumptions, an expert opinion on the lifetime of the battery in harsh conditions and the lessons learned from other relevant technology transitions on behavioural change.

As at 2017, we were working with a number of research institutions and international organisations, to take not only the original proposition forward, but to build momentum towards urban areas of Africa making more use of electricity for cooking, stabilising grids, creating financially viable mini, micro and nano grids, and increasing access via solar PV systems inclusive of the ability to cook.

As we investigated this we realised there was a massive disconnected between SDG7.1.1 promoting energy access (mostly interpreted as electricity) and SDG 7.1.2 which is mostly interpreted as clean cooking. Agencies focused on cooking talked about biomass, LPG, ethanol, etc but almost always didnt list electrciity as an option. Similarly those working in electricity listed its uses, phone charging, lights, TV, productive use, but rarely listed cooking. This 'Mutual Neglect' has now been caputred in a few papers, and the programme is increasingly focused on getting the two stakeholder groups to talk to each other, and indeed the SE4All Integrated Energy Planning is a key expression of this, and they frame it as 'Mutual Support'. The programme also focused on all eletrciity cooking overlaps so urban households were our starting point, and we have done a lot on the original proposition of Solar Home System that could cook, and as at 2023 we are just at the tipping point of affordability.

All info can best be found at www.mecs.org.uk

(For legacy reason let me leave this bit here.....It is difficult to keep up with all the words and powerpoints being created, so what appears below are a few selected documents, the rest should be found in the gamos library (which at the time of writing has crashed because Mendeley changed their rules on displays!).

Most up to date info can be found here

- BLOG - www.elstove.org www.pv-ecook.org (same site, which we have yet to feed into the Gamos blog)
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But for those wishing to see how the idea developed, here are some of the older docs.

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- Jan 2016 - Powerpoint presentation to DFID following their commissioning of an Evidence on Demand report
- Royal Geographical Society - Paper presented at the RGS annual conference
- Powerpoint discussion document - updated 20/02/2015
- Solar Photovoltaics - What price in 2020?
- Batteries - What price in 2020?
- **An Updated Brief**
- One page brief
- Original Supporting Document