LYTEFIRE SOLAR OVEN FROM FINLAND TO IMPROVE LOCAL ECONOMIES AND CLIMATE RESILIENCE

The Lytefire 5 solar oven used to implement sustainable solar bakeries, is one of the tools built and promoted by the GoSol platform.

Lytefire is a brand of <u>Solar Fire</u> <u>Concentration Itd</u>, a company based in Finland. Lytefire designs and builds solar thermal technologies to empower entrepreneurs, to create sustainable jobs and services for local economies, while contributing to minimizing the damage of climate change. Solar Fire has also developed GoSol, a social enterprise and an international platform dedicated to



projects with NGOs that include important educational aspects.

GoSol technologies are high power solar concentrators built with off-the-shelf materials available everywhere in the world. Their concentrators are cost-efficient solutions for emerging economies and GoSol works to help create solar entrepreneurs trained in the use of direct solar heat for baking, roasting nuts and coffee, dehydrating plants, fish, veggies and fruits.

In particular, GoSol has been very successful in the promotion of the Lytefire 5 solar oven, a powerful, simple, clean, local and accessible solar concentrator created to implement a solar bakery and produce bread, muffins, biscuits, pizza and many other products requested by the local communities.

<u>The GoSol website presents the projects</u> already completed or in progress using the Lytefire 5 solar oven technology in Burkina Faso, Ethiopia, Niger, Nigeria, Kenya, France, Tanzania, Uganda, Philippines, Brazilian Amazon, Viet Nam and Haiti.

The website illustrates the main features that make this solar oven a sustainable solution of interest for local economies in many countries:

- Managed by small businesses or local cooperatives, the Lytefire 5 is built using local materials so it can be fully maintained; all parts can be replaced and purchased in towns and cities of every country.
- a Lytefire 5 Solar Oven can bake about 500 cookies and 50 to 110 kg of bread per day, depending on the season. This powerful technology is a solid choice reaching up to









300°C baking temperature, with an even heat distribution for high quality baking.

- The oven doesn't require fuel costs. In many rural areas the Lytefire 5 solar concentrator replace costly and unstable electricity, firewood and charcoal with direct solar energy.
- One Lytefire 5 solar concentrator prevents up to 16 431 kg of CO2 emissions per year.

The website also illustrates the principles and methodologies adopted to design and manage the projects. Working with their international partners, the GoSol team is running several educational projects to support local solar entrepreneurship. All the projects began sourcing the materials, getting to know the workshop and welders and started taking the first steps to build at least one Lytefire 5 with baking oven.

Depending of specific interests of the sponsors and needs of local actors involved (local governments, NGOs, schools, communities, cooperatives), the GoSol team can also extend the training activities for the use of other solutions for baking, roasting nuts & coffee, dehydrating plants, fish, veggies and fruits in order to empower more solar entrepreneurs with sustainable living. In Tanzania and Kenya, for example, local entrepreneurs are using a hybrid Lytefire 5 Oven/Roaster which can also roast peanuts, coffee and cocoa.

By the years the Solar Fire Concentration Itd company has been working in order to maximize the impact of solar thermal technology by reducing it cost and building an ecosystem of <u>brands</u> and <u>partners</u>. Their brands currently includes <u>Lytefire</u> product, rapidly enabling anyone to become a solar entrepreneur; <u>GoSol</u> community and education hub to spread the Lytefire 5 Solar Ovens to high-impact settings; <u>Solar Fire</u> <u>France</u> which is commercializing the Lytefire 5 Oven and Roaster applications in the French market and the <u>Lytefire</u> <u>Sauna</u> which demonstrates the power of the sun for carbon free well-being and tourism.

In the Projects section of the GoSol website, the articles presenting the initiatives ongoing in different countries give information on the results achieved and also on the partners involved. GoSol highlights that the Lytefire solar concentrator addresses seven of the Sustainable Development Goals of the 2030 Agenda. The book <u>Direct Solar Economy book is the Manifesto of GoSol</u>, presenting their experience and their vision of a global solar economy to empower people locally and create wealth with a clean technology.

The GoSol website invites all interested actors <u>to establish</u> <u>contacts and participate</u> in promoting these innovative solutions around the world.





To know more

GoSol website

GoSol website

GoSol Press Release

GoSol approach

GoSol projects

Direct Solar Economy book – GoSol Manifesto

GoSol in Facebook

Solar Fire website

Solar Fire brands

