

Solar cooking appliances use free, no-emission solar energy to cook food and pasteurize water. Women and children breathe cleaner air when their food is cooked with solar cookers. Released from the danger and drudgery of gathering wood for cooking fuel, women and children have more time and money for continuing their education, preparing goods for market, caring for family members – or simply resting. Solar cooking aligns with all 17 SDGs:



Goal 1. End poverty in all its forms everywhere – Energy costs proportionately more for vulnerable people. Access to free, no-emission solar thermal energy builds resilience. Solar technologies for cooking help end poverty.



Goal 2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture - With free solar thermal energy for cooking, families can cook all quantities and types of traditional and highly nutritious foods. Solar energy reduces demand for biomass and fossil fuels, improving soil and water quality.



Goal 3. Ensure healthy lives and promote well-being for all at all ages - Women and their young children experience the highest exposure to household air pollution, the number one cause of disease. Solar thermal cookers do not produce flames, so burn risk is greatly reduced, particularly for women and children.



Goal 4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all - Freed from the time-intensive tasks of gathering biomass fuel for cooking fires by solar cooking, vulnerable persons, including the indigenous, those with disabilities, and children, can choose time for education and study.



Goal 5. Achieve gender equality and empower all women and girls – Cooking with solar energy reduces women’s and children’s exposure to violence when gathering biomass fuels. Women and children can gain up to 5 hours/day for education, empowering them for leadership roles.



Goal 6. Ensure availability and sustainable management of water and sanitation for all - Sustainable management of drinking water supplies for all will rely on decentralized pasteurization of local water sources. Solar thermal cookers can make water safe to drink, addressing water scarcity and reducing diarrheal disease.



Goal 7. Ensure access to affordable, reliable, sustainable, and modern energy for all - Solar thermal energy is clean, efficient, and sustainable. It does not need to be gathered or purchased, and is available in all regions on all continents. Enough solar energy reaches the Earth every hour to power all human activity for one year.



Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all - Cooking with free solar energy reduces household fuel costs and helps break the cycle of energy poverty.



Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation - Solar technologies reduce the need for centralized energy infrastructure and increase resilience for all. Many innovative solar cookers can be made using locally-sourced materials.



Goal 10. Reduce inequality within and among countries - Free solar energy is accessible to all people, irrespective of age, sex, gender, disability, ethnicity, origin, religion, or economic or other status.



Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable - Solar energy can be used in urban settings where biomass fuels are less available. Solar energy use reduces competition and conflict for energy in urban settings.



Goal 12. Ensure sustainable consumption and production patterns - Free solar-thermal energy reduces environmental costs of fuel production and delivery. Solar energy is renewable and contributes to sustainable patterns of household energy consumption and production.



Goal 13. Take urgent action to combat climate change and its impacts - No-emission solar energy reduces production of climate-change forcing agents, such as greenhouse gases and black carbon produced by combustion of fossil fuels and biomass fuels.



Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development - Healthy biomass helps soil absorb water, reducing pollutants and fertilizers in the oceans. Preserved forests sequester carbon which could lessen the burden on oceans to absorb excess carbon that warms the seas.



Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss - Cooking and pasteurizing water with solar energy preserves forests, and curbs land degradation and desertification.



Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels - Access to solar energy achieves our human right to cooked food and safe water. Solar energy reduces human conflict over scarce fuels.



Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development - Solar cooking technologies strengthen and empowers community members, particularly women, to be change agents for revitalized, resilient and sustainable development.

