

## **M121**

### **Solar cooking and its contribution to healthy and resilient ecosystems and communities**

NOTING that 2012 has been designated as the United Nations International Year of Sustainable Energy for All;

RECOGNIZING that 2.7 billion people, women in particular currently cook over biomass fires or stoves, with significant negative consequences for human health (1.9 million deaths per year), household economics, deforestation, ecosystem degradation and climate change;

ACKNOWLEDGING that even taking into account both the warming and cooling effects of the various emissions from cooking fires, several studies suggest that the combined emissions from household cooking fires and stoves may have a net warming effect equivalent to millions of tonnes of CO<sub>2</sub> annually, as well as one quarter of global emissions of black carbon;

RECOGNISING the urgent need for ecologically sustainable, healthier, reliable, safer cooking options for much of the world, and aware that an array of technologies exist and are being further developed to fulfil this need;

NOTING that the widespread adoption of better cook stove technologies is hindered by supply side and demand side constraints, as well as policy barriers

NOTING that the Global Alliance for Clean Cookstoves (initiated by the U.N. Foundation and the Shell Foundation) has set a target of replacing open fires with 100 million clean cookstoves by 2020, with a primary emphasis on clean-burning biomass cookstoves to improve human health;

RECOGNIZING that solar thermal cooking (non-photo-voltaic) requires no fuel other than sunlight, including no use of wood or biomass;

FURTHER RECOGNIZING that cooking with clean solar ovens produces zero pollution or carbon emissions, being healthy for people and the atmosphere;

NOTING that solar thermal cooking can help communities, women in particular adapt to changing climates that may reduce the availability of wood and other biomass traditionally used for cooking;

RECALLING that Recommendation 12 *Energy and Conservation* adopted by the 12<sup>th</sup> IUCN General Assembly (Kinshasa, 1975) recommends “that governments foster large-scale public understanding and balanced discussion of the wide range of energy choices available, public awareness of natural limits to man’s use of energy, and public readiness to engage in ways of life compatible with these principles”;

ALSO RECALLING that Resolution 4.082 *Sustainable biomass-based energy* adopted by the 4<sup>th</sup> IUCN World Conservation Congress (Barcelona, 2008) highlights the potentially negative impacts of biomass-based energy on biodiversity and food security;

NOTING that the Sustainable Energy Initiative of IUCN promotes energy solutions that are economically, socially and environmentally sustainable;

ALSO NOTING that increased use of sustainable solar thermal cooking contributes to all three of the Global Programme Areas in the *IUCN Programme 2013–2016*, Valuing and

Conserving Nature, Effective and Equitable Governance of Nature's Use, and Deploying Nature-based Solutions to Global Challenges in Climate, Food, Development;

***The World Conservation Congress, at session in Jeju, Republic of Korea, 6–15 September 2012:***

1. CALLS ON IUCN Members and governments to:
  - a. Explore the appropriate applications of solar cooking in their own countries, including expanding research into improving the technology and its adoption and adding solar cooking to their own renewable energy policies;
  - b. Disseminate widely the Report referenced in 2c on the research and current use of solar cooking in their countries; and
  - c. Promote in international fora in which the Member participates, the inclusion of solar thermal energy as part of a complete and sustainable solution for clean cooking where it can contribute to healthy, resilient ecosystems and communities;
2. CALLS ON the Director General to:
  - a. Promote the inclusion of solar thermal energy as part of a complete and sustainable solution for clean cooking and integrate it into the Sustainable Energy priority and other relevant Programme Areas of the *IUCN Programme 2013–2016*;
  - b. Examine the possible contributions of expanding the use of solar cooking for healthy and resilient ecosystems, including forested and arid lands, and report to the next IUCN World Conservation Congress; and
  - c. Consider the reports from IUCN Members on solar cooking research and use, and compile these into a global report on the “*Global State of Solar Cooking and Its Contribution to Healthy and Resilient Ecosystems and Communities*” including women and children to be submitted to the next IUCN World Conservation Congress in 2016 for review;
3. CALLS ON IUCN Members and Commissions, in particular the Commission on Environmental, Economic and Social Policy (CEESP), the Commission on Ecosystem Management (CEM) and the World Commission on Protected Areas (WCPA), to:
  - a. Consider the ways in which replacing biomass-fuelled cooking fires and cookstoves with solar ovens and other renewable energy cooking options can contribute to their mandates, particularly, biodiversity conservation, ecosystem health, improving livelihoods and mitigating climate change; and
  - b. Contribute to the Report on the *Global State of Solar Cooking and Its Contribution to Healthy and Resilient Ecosystems and Communities*; and
4. CALLS ON IUCN Members participating in the Global Alliance for Clean Cookstoves to:
  - a. Encourage the Global Alliance to increase research, distribution and use of non-biomass cookstoves, such as solar ovens and stoves, as part of the Alliance objectives, and to participate in these activities as part of their own contribution to the Alliance efforts; and

- b. Ensure that any of the global cookstove standards agreed include criteria appropriate for determining the effectiveness of non-biomass as well as biomass stoves, as well as for measuring all impacts of various types of cookstoves, including economic, ecosystem, human health and atmospheric impacts.

Sponsor:

Solar Household Energy, USA

Co-Sponsors:

Center for Environmental Legal Studies, USA

Earth Day Network, USA

Grupo Jaragua, Dominican Republic

InterEnvironment Institute, USA

Natural Resources Defense Council, USA

*Comment:* the implementation of the activities foreseen in this motion requires additional resources.

### **Explanatory Memorandum**

Almost half the world's population depends on wood, charcoal and other biomass for their daily cooking. These cooking fires cause respiratory disease and deaths (1.9 million per year), waste of meager household incomes spent on fuel, time lost collecting wood, in addition to land degradation, deforestation and biodiversity loss from gathering fuelwood, and a significant global contribution to climate change. Most of these households are found in places where sunshine is abundant. Solar thermal cooking offers a healthy, no-cost, pollution-free, ecosystem-friendly alternative to biomass cooking. Its use can contribute to the resilience of people, communities, ecosystems and the planet, by reducing the need to collect or purchase biomass for fuel, and a cooking method which produces zero air pollution and greenhouse gas emissions. When combined with a fuel-efficient stove, it can provide a round-the-clock, year-round cooking solution with only 5% of the fuel and emissions of traditional cooking fires.

While IUCN has several resolutions on energy technologies, most of these are on large-scale power or biomass fuel production. Globally, household scale cooking uses an enormous amount of biomass energy, while generating significant smoke and emissions. This resolution seeks to address the fact that increasing the use of solar thermal cooking in sun-rich regions around the world can help to protect forests, ecosystems, human health and the global atmosphere. Solar cooking supports all of the many goals of IUCN for nature and for people. The topic of solar cooking is relevant to all five areas of the *IUCN Programme 2013–2016*, addressing them all with a single simple solution. It is a natural fit that IUCN has not before addressed. This resolution will enable IUCN to embrace and publicize the many benefits of solar cooking through increased research and promotion.