APPROVED ENGAGEMENT STRATEGY FOR THE HOUSEHOLD ENERGY SECTOR

1. Objective

Within the household energy sector, this strategy is focused on reducing black carbon and methane from cooking, heating and lighting in both rural and urban settings in low and middle-income countries (LMICs). Household energy is responsible for more than 50% of global anthropogenic black carbon emissions, as well as methane and CO2 emissions that impact health and increase the rate of climate change. The strategy will be led by the CCAC Household Energy Hub (see Annex 1) and aligns with SDG7 to increase access to modern energy services, with a focus on supporting national governments to provide the cleanest possible solutions. It builds on previous research and pilot projects supported by the CCAC, and drives action in line with the UN "Theme Report on Energy Access: Towards the Achievement of SDG 7 and Net-Zero Emissions," and "A Strategic Roadmap to promote healthier populations through clean and sustainable energy" endorsed by the High-Level Coalition on Health and Energy convened by the WHO under the Health and Energy Platform of Action.

Recognizing international policy and technical mechanisms exist, the CCAC will complement work in this sector by supporting national governments in the implementation of household energy targets in their NDCs and related policies and commitments (including guidance on monitoring and reporting); collaborating with related organizations and fora to incorporate SLCP emission reductions into their work; improving scientific communication of the multiple benefits of reducing black carbon and methane emissions; and creating local and national awareness of the multiple benefits from emission reductions to drive political support for action through communication materials and at international events.

2. Goals

Our goal is that **by 2030**, all CCAC State Partners have included household energy in their integrated air quality, climate, and health planning, and that all CCAC State Partners have substantially increased sustained usage of clean/modern fuels and technology, e.g. electricity, solar, ethanol, etc. to mitigate black carbon and methane emissions at the national and sub-national scales. This will require a system-level paradigm shift, as outlined in the UN Theme Report on Energy Access for SDG7.

To achieve these goals, the CCAC will work closely with the CCAC National Planning and Policy Hub to encourage countries to prioritize action in the following areas: i) inclusion and implementation of household energy SLCP mitigation measures in NDCs and other related sectoral policies that impact and are impacted by household energy at national and sub-national scales by 2030; ii) monitoring and reporting of SLCP mitigation actions in the household energy sector; iii) action from the private sector to reduce SLCPs in the household energy sector through mobilization and preparing the private sector actors to be investor ready and scale technologies; and iv) increase climate finance by national and sub-national governments for SLCP emissions reductions from the household energy sector. The CCAC will aim to provide support to countries through policy and technical support as well as peer-to-peer support depending on the national context with a focus on community engagement and public awareness to support scale up of new technologies.

By 2025, all CCAC State Partners will have undertaken steps to achieve the following milestones:

- Developed, prioritized and endorsed SLCP emission reduction strategies and/or plans for household energy consistent with their NDCs and related commitments to support global climate goals and national air quality standards;
- Designed and implemented programs to increase awareness on SLCP from household energy use, their harmful impacts and benefits of using clean and sustainable energy solutions.
- Institutionalised monitoring and reporting systems that can track progress in taking action and reducing emissions and impacts from household energy;
- Increased engagement from the private sector to scale new technology;
- Increased financing to implement measures to achieve SLCP emissions reductions from household energy from domestic resources and climate finance.

The CCAC will support the achievement of the 2025 milestones above through the following activities:

- coordinate with the CCAC National Planning and Policy Hub, the Clean Cooking Alliance, the World Health Organization, and other partners and related mechanisms to develop capacity to support at least 35 national and sub-national strategies and plans that include household energy SLCP mitigation measures to achieve emission reductions;
- develop guidance and support capacity building to develop baselines and implementation of monitoring and reporting in at least 25 countries to track progress in taking action and reducing emissions and impacts from household energy;
- convene partner networks to provide technical support to at least 10 countries in making funding submissions to the GCF, NAMA Facility, UNFCCC Article 6 of the Paris Agreement, development agencies, etc. with collaboration from the private sector and related partners to increase financing for SLCP emissions reductions from household energy;

3. CCAC's Niche For This Work

The CCAC complements other international efforts tackling the crisis more broadly from different perspectives, especially the Clean Cooking Alliance (CCA) with a focus on market-based solutions; Energia with a focus on gender and sustainable energy; Modern Energy Cooking Services (MECS) with a focus on scaling up electricity access; Sustainable Energy for All (SEforAll) with a focus on increasing finance; World Bank Energy Sector Management Assistant Program (ESMAP) and associated Clean Cooking Fund with a focus on financing large-scale clean cooking programs; and the World Health Organization's focus on health and air quality. The Health and Energy Platform for Action (HEPA) convened by the WHO is bringing these multiple issues and perspectives to the forefront of the international agenda.

The CCAC will work closely with these complementary international efforts to scale up multiple benefits for health and climate through Secretariat contributions to related working groups (e.g. HEPA); expert leadership from related organizations in the Household Energy Hub Leadership Group; providing support for coordinating country outreach, leveraging finance, and providing scientific input for related work among CCAC Partners.

4. What the CCAC Will Do and Support

The CCAC should capitalise on its convening power and platform, supporting counties by bringing together all relevant national and global partners by linking the SLCP agenda as enabler of NDC implementation and articulating a clear 'impact pathway'. This means offering up a package of support from technical

assessments through to large-scale investment, specifically the use of public climate finance to de-risk private investment and overcome capital barriers to entry for cleaner technologies in lower-income countries. The CCAC will coordinate action through the Household Energy Hub in collaboration with the National Planning and Policy Hub and Scientific Advisory Panel (SAP) to:

- *support countries* based on national requests to realize the full potential of black carbon and methane emission reductions from the household energy sector as part of their NDCs and other related national and sub-national integrated climate change and air pollution mitigation efforts, including by identifying financing for priority measures;
- *support key organizations* to ensure SLCP emissions reductions from the household energy sector is well-integrated into their broader efforts to support national action;
- *improve scientific communication* to quantify the multiple benefits of black carbon emissions reductions and quantify methane emissions from the household energy sector, including the broader benefits from reduced deforestation for CO_2 emissions and biodiversity, within the context of sustainable development; and
- *increase awareness* of the multiple benefits at the local and national level by developing communication materials for local policy makers and health professionals, and by increasing political support for financing at key international events, such as UN Day of Clean Air for blue skies, UNFCCC Regional Climate Weeks and COP, and other key milestone events.

5. What the CCAC Will Build Off Moving Forward

The CCAC's Household Energy Initiative received an external evaluation in 2019 covering its progress from 2012-2019. The evaluator found that the Initiative had been successful in raising awareness, increasing global political support, and developing tools to measure black carbon emissions. However, it found that action at the country level to reduce emissions was not yet achieved, and the report's primary recommendation was to "strategically reposition the Household Energy Initiative as a platform for peer support to country-level initiatives with a singular mandate, namely supporting action on SLCP emission reductions." Building on past success, incorporating the evaluation recommendations, and following extensive dialogue as part of the development of the CCAC's 2030 Strategy, the Household Energy Hub will focus on providing support at the national level to scale up implementation of SLCP emission reduction activities from the household energy sector through:

- National Plans adopted by countries;
- Progress in countries under the former SNAP Initiative;
- Tools and guidance developed by the former SNAP Initiative, WHO, World Bank, the Clean Cooking Alliance, and other partners to support emission reductions from the household energy sector;
- Finance for the household energy sector from climate funds (e.g. GCF, NAMA); World Bank Clean Cooking Fund; development agencies; and other relevant organizations
- Private sector engagement in the household energy sector;
- CCAC Scientific Advisory Panel assessments;
- Political action supported by the WHO HEPA, World Bank Clean Cooking Fund, SEforAll, Clean Cooking Alliance and other CCAC Partners.

ANNEX 1 – CONTEXT

Globally, 2.6 billion people[1] rely on solid fuel and kerosene to cook, light and heat their homes, which emit black carbon, methane, and other air pollutants that cause an estimated annual 4 million premature deaths (both from direct exposure, and from the contribution of household energy emissions to ambient air pollution) and a significant fraction of non-communicable disease from stroke, heart disease, lung cancer and chronic respiratory diseases.

The sector is responsible for more than 50% of global anthropogenic black carbon emissions which contribute to an increased rate of global temperature increase, alter regional weather patterns and rainfall, and accelerate the melting of snow and ice. Household energy is also a source of methane, primarily from charcoal production. Emissions of carbon monoxide from household energy also increase the lifetime of methane in the atmosphere, leading to increased concentrations. As outlined in the May 2021 CCAC/UNEP Global Methane Assessment, methane emissions can be reduced by up to 45 per cent this decade, which is necessary to achieve the Paris Agreement's 1.5° C target at a reasonable cost, and would avoid nearly 0.3°C of global warming by 2045. In addition, burning biomass contributes CO_2 emissions and the Intergovernmental Panel on Climate Change Special Report on 1.5°C (IPCC SR1.5) states that lack of access to clean and affordable energy for cooking is a major policy concern in many countries where major parts of the population still rely primarily on solid fuels for cooking. Collection of fuel wood and charcoal production for cooking and heating also contributes to forest degradation, loss of biodiversity through habitat loss, and land use change.

Women and children are disproportionately impacted by the air quality impacts of household energy as they spend more time close to polluting stoves compared to men, and therefore experience a higher share of the health impacts from high exposure to household air pollution and to the risk of kerosene cooking and lighting explosions. In addition to the direct health impacts, in rural areas, women and girls who collect biomass fuel far from the safety of their homes are at high risk of physical injury from carrying heavy fuel wood on their heads and backs, and in urban areas there is a large time investment in lighting the stoves, cleaning and delayed meals. In both rural and urban areas women and children face a wide range of discomfort and drudgery and may be negatively impacted by the loss of economic productivity and educational opportunities from time spent gathering fuel, and from the subsequent health conditions that may arise.

The scope and severity of impacts from cookstoves, heating stoves, and kerosene lamps on the health and environment necessitate an immediate and concerted response from the global research, policy, and donor communities to alleviate poverty and protect the planet. Since the Clean Cooking Alliance (CCA) was founded in 2010, in July 2021 more than 400 million people have gained access to clean cooking fuels and technologies, with more than 4.6 million lives saved from harmful health impacts attributed to household air pollution. Lighting Global is the World Bank Group's platform to support sustainable growth of the international off-grid solar market as a means of rapidly increasing energy access to the 789 million people living without electricity. However, finance for this sector is far below what is needed; for example, SEforAll estimates that USD 4.5 billion is required annually up to 2030 to ensure universal access to clean cooking solutions. Wide-scale adoption of clean, low-emission and efficient cookstoves, heating stoves and lighting

[1] SEforAll, 2019 https://www.seforall.org/data-and-evidence/understanding-sdg7

will support both the Paris Agreement 1.5 degree Celsius temperature target and the Sustainable Development Goals (SDGs), especially SDG 7, which aims to "ensure access to affordable, reliable, sustainable and modern energy for all". Solutions are available: as noted in the UN Theme Report on Energy Access for SDG7, clean cooking is essential, and policies should reflect the major multi-sectorial benefits of universal access to clean cooking.