



CLEAN  
COOKING  
ALLIANCE



# Nationally Determined Contributions and Clean Cooking

## Clean cooking is critical to achieving climate goals

We cannot achieve our global climate goals without reducing emissions from cooking. Transitioning to cleaner, more efficient cooking fuels and technologies reduces pressure on forests and lowers CO<sub>2</sub> emissions. It also reduces emissions of black carbon, a powerful, short-lived climate pollutant that warms the atmosphere much more quickly than CO<sub>2</sub>. Household fuel combustion is currently the single largest source of man-made black carbon emissions. Recognizing clean cooking as a critical climate solution can help unlock the political will and financing needed to deliver these solutions at scale.

## Clean cooking in NDCs

Including clean cooking in Nationally Determined Contributions (NDCs) marks significant progress in using clean cooking to mitigate climate change, while also leveraging its adaptation and economic development co-benefits.

As of July 2025, 74% of low- and middle-income countries include clean cooking-specific or broader household energy measures in their NDCs (full list on next page). Of these, 61 countries (46%) include at least one measure that explicitly targets clean cooking. The remaining 38 countries (29%) include broad household energy measures that could apply to either cooking, lighting, and/or heating (e.g., Achieve 19% reduction in emissions from the energy sector by 2030 by using energy-efficient appliances in households).

## Clean Cooking and Climate

- Greenhouse gas emissions from non-renewable woodfuels for cooking total 1 gigaton of CO<sub>2</sub>e per year, representing about **2% of global emissions**, on par with emissions from aviation or shipping.
- **>40% of man-made black carbon emissions** come from household energy use.
- **27-34% of woodfuel** harvested globally for all uses is unsustainable.
- High-efficient stoves can achieve a **30-60% reduction in fuel use**.

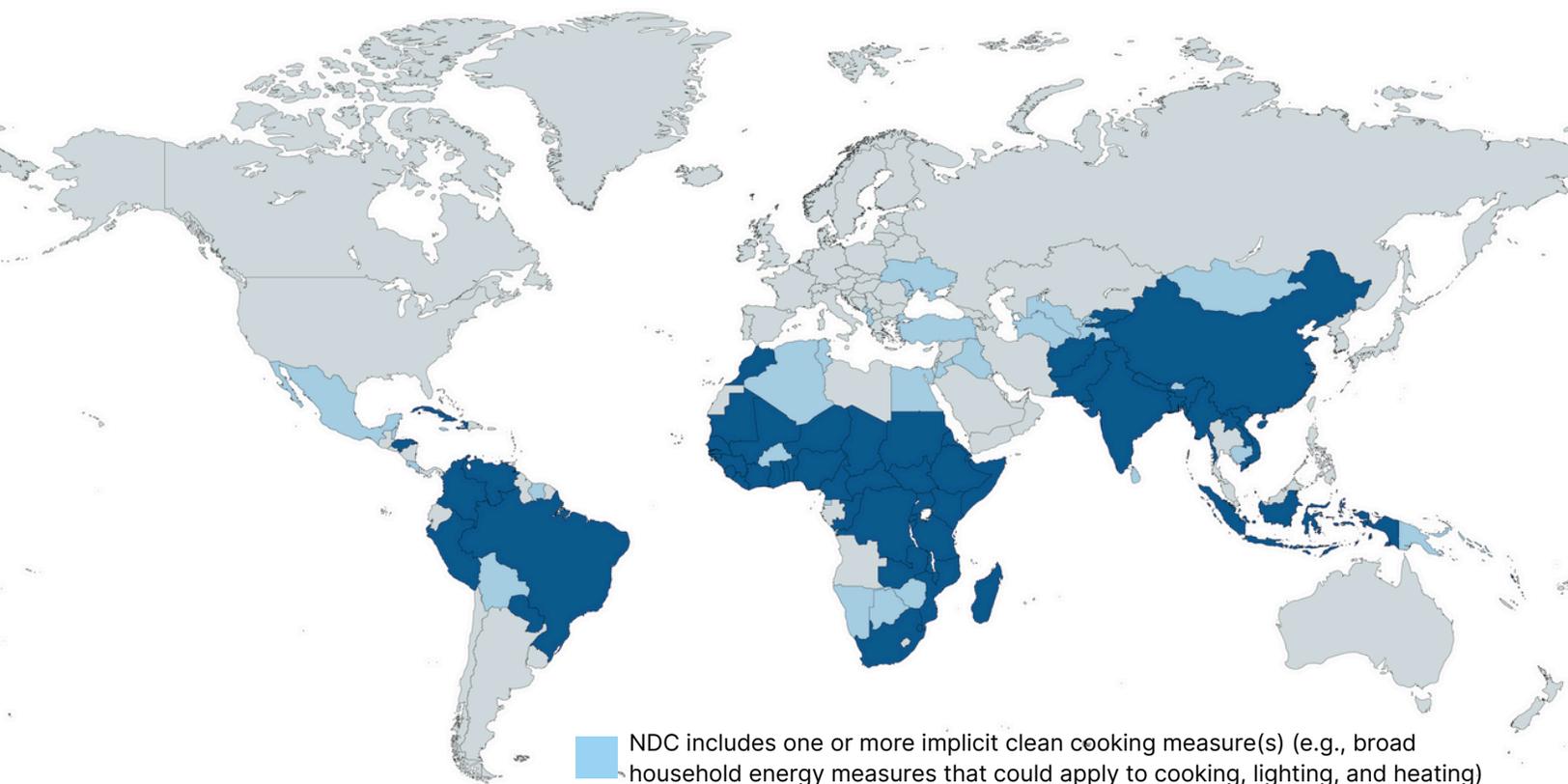
## Examples of clean cooking targets in clean cooking



**Nepal:** "By 2035, expand the use of electric cookstoves from 400,000 households to 2.1 million households and an additional 15,000 institutions and firms"



**Rwanda:** "Dissemination of modern efficient cookstoves to 80% of the rural population and 50% of the urban population by 2030."



Light blue: NDC includes one or more implicit clean cooking measure(s) (e.g., broad household energy measures that could apply to cooking, lighting, and heating)

Dark blue: NDC includes one or more explicit clean cooking measure(s)

\*As of July 8, 2025

- |                        |                       |                     |                        |                  |
|------------------------|-----------------------|---------------------|------------------------|------------------|
| 1. Afghanistan         | 21. Congo, D.R (DRC)  | 41. Iraq            | 61. Morocco            | 81. Sudan        |
| 2. Albania             | 22. Congo, Rep.       | 42. Jamaica         | 62. Mozambique         | 82. Suriname     |
| 3. Algeria             | 23. Costa Rica        | 43. Jordan          | 63. Myanmar            | 83. Tajikistan   |
| 4. Bangladesh          | 24. Cote d'Ivoire     | 44. Kenya           | 64. Namibia            | 84. Tanzania     |
| 5. Belize              | 25. Cuba              | 45. Kiribati        | 65. Nepal              | 85. Timor-Leste  |
| 6. Benin               | 26. Djibouti          | 46. Kyrgyz Republic | 66. Niger              | 86. Togo         |
| 7. Bhutan              | 27. Dominica          | 47. Lao PDR         | 67. Nigeria            | 87. Tonga        |
| 8. Bolivia             | 28. Egypt             | 48. Lesotho         | 68. Pakistan           | 88. Tunisia      |
| 9. Botswana            | 29. Equatorial Guinea | 49. Liberia         | 69. Palau              | 89. Turkiye      |
| 10. Brazil             | 30. Eritrea           | 50. Madagascar      | 70. Papua New G.       | 90. Turkmenistan |
| 11. Burkina Faso       | 31. Eswatini          | 51. Malawi          | 71. Paraguay           | 91. Tuvalu       |
| 12. Burundi            | 32. Ethiopia          | 52. Maldives        | 72. Peru               | 92. Uganda       |
| 13. Cabo Verde         | 33. Ghana, The        | 53. Mali            | 73. Rwanda             | 93. Ukraine      |
| 14. Cambodia           | 34. Ghana             | 54. Mauritania      | 74. Senegal            | 94. Uzbekistan   |
| 15. Cameroon           | 35. Guinea            | 55. Mauritius       | 75. Sierra Leone       | 95. Vanuatu      |
| 16. Central African R. | 36. Guinea-Bissau     | 56. Mexico          | 76. Solomon Islands    | 96. Venezuela    |
| 17. Chad               | 37. Haiti             | 57. Micronesia      | 77. Somalia            | 97. Vietnam      |
| 18. China              | 38. Honduras          | 58. Moldova         | 78. South Sudan        | 98. Zambia       |
| 19. Colombia           | 39. India             | 59. Mongolia        | 79. Sri Lanka          | 99. Zimbabwe     |
| 20. Comoros            | 40. Indonesia         | 60. Montenegro      | 80. St Vin. and the G. |                  |

This preliminary analysis was conducted by the Clean Cooking & Climate Consortium (4C) and is based solely on each country's NDC. If you know of an NDC clean cooking measure that is not listed here, please contact [climate@cleancooking.org](mailto:climate@cleancooking.org).

This analysis does not evaluate the level of detail or quality of NDC measures. Even if a country is marked as including an explicit clean cooking NDC measure, this does not necessarily mean that the measure is comprehensive, achievable, and verifiable. The amount of detail that countries provide at the clean cooking level varies significantly; some countries include broad goals without detail, while others provide specific targets and technologies, costs of implementation, expected emissions reduction potential, conditionality, and more. To obtain a copy of this analysis, including methodological details, please email [climate@cleancooking.org](mailto:climate@cleancooking.org).

## About the Clean Cooking & Climate Consortium

In 2021, the Clean Cooking Alliance (CCA) convened the Clean Cooking & Climate Consortium (4C), a partnership led by CCA that includes the United States Environmental Protection Agency (U.S. EPA), Berkeley Air Monitoring Group, Stockholm Environment Institute (SEI), United Nations Framework Convention on Climate Change (UNFCCC) secretariat, and Climate and Clean Air Coalition (CCAC). This consortium was formed to provide practical and technical guidance to country governments intending to use cooking energy interventions to achieve climate goals, as part of their NDC targets or to create tradable assets under the Article 6 framework.

## How can countries access 4C support in identifying how to best meet their climate goals through clean cooking?

4C provides support at multiple levels, including through webinars and guidance documents; multi-country, expert consultations in response to partner requests; in-depth, country-specific technical consultations, including for the development of MRV plans and funding proposals; and technical advising on carbon credit standards and methodologies.

For more information, please [www.cleancooking.org/4C](http://www.cleancooking.org/4C) or email [climate@cleancooking.org](mailto:climate@cleancooking.org).



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TO REDUCE SHORT-LIVED  
CLIMATE POLLUTANTS

