



# CHARTER OF INDIA COOLING COALITION

Supported by Shakti Sustainable Energy Foundation  
Prepared by Alliance for an Energy Efficient Economy



# About the Charter of India Cooling Coalition

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India Cooling Coalition is a multi-stakeholder group led by representation from non-profits, academic and research institutions, and industry associations who are engaged extensively in sustainable cooling research and application. The ‘Charter Document’ of India Cooling Coalition puts forward the rationale for its establishment, its vision, and goals along with targeted outcomes to support the implementation of the India Cooling Action Plan (ICAP). Keeping in view that the India Cooling Coalition will be working to support the implementation of ICAP (which provides a 20-year perspective for achieving cooling demand reduction), the scope of activities of the Coalition presented in this document will be updated in consultation with Ministry of Environment, Forests and Climate Change (MoEF&CC), line ministries and members of the coalition.

By adopting this ‘Charter Document’, it is understood that India Cooling Coalition comprising of Funding Agency, Secretariat, and the Members hereby agree to the provisions made in the document for the undertaking work under the Coalition. Any amendments made in this ‘Charter Document’ of India Cooling Coalition can only be adopted post consensus amongst all the members of the Coalition.

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# 1. Background

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India, with a population of 1.35 billion & rising, room air-conditioner penetration of less than 10%, and cooling degree days higher than 1,500 (base temperature of 23°C) is staring at a massive problem of providing thermal comfort to all affordably and sustainably. The demand for cooling shall continue to rise with economic growth, population increase, rapid urbanization, changing lifestyles, growing penetration of air conditioners, and increasing heat stress (attributed to hot and humid tropical zone). This would lead to higher electricity demand, peak loads, and enormous carbon footprints which need to be tackled strategically through timely and incremental interventions.

Realizing the strain this growing cooling demand could create over the country's energy sources and environment, the Government of India released the seminal India Cooling Action Plan (ICAP) on 8<sup>th</sup> March 2019 which has been an inflection point in the advancement of the future of cooling in India. The India Cooling Action Plan seeks to provide an integrated vision to meet emission reduction targets while providing linkages with various developmental programs of the Government. aimed towards improvement in the quality of life.

The ICAP highlights the cooling requirement, associated refrigerant demand, and energy use towards space cooling in buildings, cold-chain, refrigeration, and transport air-conditioning. It comprehensively documents necessary interventions to increase energy efficiency in the cooling domain including skilling of Refrigeration and Air-conditioning (RAC) service technicians, indigenous production of refrigerants, and R&D in the cooling domain. The implementation of ICAP has to be driven through efforts of different ministries and agencies, at both the central and state level. This indicates the need for a strong pro-active and collaborative approach to achieve sectoral recommendations. India Cooling Coalition would be a catalyst in the development of synergies between multiple stakeholders and providing necessary support in the form of policy reviews and suggested actions to accelerate the implementation.



## 2. About India Cooling Coalition

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Acknowledging the need for collaborative and concerted action in space cooling, the Sustainable and Smart Space Cooling Coalition (SSSCC) forum was instituted in 2016 by AEEE in collaboration with Shakti Sustainable Energy Foundation (SSEF). With the key participation of 12-member organizations leading the research in multiple aspects of space cooling, the intention was to bring forth focused efforts in promoting energy-efficient and environmentally sustainable cooling design strategies and technologies. These organizations included:

- Shakti Sustainable Energy Foundation (SSEF)
- Alliance for an Energy Efficient Economy (AEEE) – Secretariat
- Council on Energy, Environment, and Water (CEEW) – Member
- CEPT University – Member
- CLASP – Member
- Fairconditioning – Member
- International Council for Local Environmental Initiatives (ICLEI) – Member
- Indian Society of Heating, Refrigerating and Air-conditioning Engineers (ISHRAE) – Member
- Malaviya National Institute of Technology (MNIT) – Member
- National Resources Defense Council (NRDC) – Member
- Prayas (Energy Group) – Member
- Smart Joules – Member

The following paragraphs highlight the evolution of ‘Sustainable and Smart Space Cooling Coalition’ over the years and its culmination to ‘India Cooling Coalition’ in its current form:

- Phase I (2016–17) of the SSSCC: Cognizant of the fact that active cooling, especially air conditioner technology, leads to increased peak demands and overall energy consumption, the Coalition focused on sustainable and smart space cooling in its first phase in 2017. It prepared the ‘Thermal Comfort for All – Sustainable and Smart Space Cooling’ report which was released by the Ministry of Environment Forest and Climate Change (MoEFCC) in September 2017.
- Phase II (2017–19) of the SSSCC: In its second phase, the SSSCC with the addition of Centre of Policy Research (CPR), Greentech Knowledge Solutions Pvt. Ltd (GKSPL), Glazing Society of India (GSI), India Green Building Council (IGBC), and The Energy Resources Institute (TERI); convened in the wake of the India Cooling Action Plan (ICAP) released by the Ministry of Environment,

Forest & Climate Change. The Coalition agreed to lend its common drive to further the national agenda put forth by the ICAP. The Coalition members based on their expertise contributed significantly towards the framing of the India Cooling Action Plan.

## Recasting the “Sustainable and Smart Space Cooling Coalition” as “India Cooling Coalition” in its Phase III and onwards

On 5 December 2018, the Coalition met to deliberate over how it could use its members’ individual and collective expertise to advance and support the agenda of the draft India Cooling Action Plan (ICAP). The objective was to identify *themes* that groups of members could align with based on their strengths and interests and then outline corresponding *activity-types* within each theme, as outlined in Table 1.

As noted in Table 1, the Coalition members’ collective capabilities span across multiple and cross-cutting aspects of cooling – not limited to space cooling in buildings – as demonstrated during some of the Coalition members’ involvement in the development of the ICAP. As such, the Coalition intends to leverage the team’s collective skills to address cooling in an all-inclusive manner and continually support the implementation of the ICAP. This is the rationale for re-positioning the Coalition and recasting it as the “India Cooling Coalition” in its 3<sup>rd</sup> Phase onwards.

The Coalition will provide a national non-governmental platform for dialogue with various national and international stakeholders and jointly recommend policy initiatives to ensure the success of government programs on smart cities, smart grid, housing, buildings, universal access to power, cold-chain, transport sector, refrigeration servicing sector while ensuring affordable and sustainable cooling for all.

TABLE 1: MAPPING COALITION STRENGTHS & INTERESTS IN THE CONTEXT OF ICAP

Theme	Aligned Coalition member	Training/ Capacity building/	Awareness campaigns	Joint-research	Thought leadership collaterals	On-the-ground implementation	Advocacy - policy & planning
Standards & Labeling of appliances	CLASP, ISHRAE, PRAYAS, AEEE, SSEF		Yes		Yes		Yes
Technology (R&D, not-in-kind cooling, controls)	CEEW, MNIT, ISHRAE, FC, SJ, ICLEI, IGBC, AEEE			Yes	Yes	Yes	
Refrigerants	CEEW, CLASP, IGBC, NRDC	Yes	Yes		Yes		Yes
Service sector	ISHRAE, SSEF, CEEW	Yes	Yes			Yes	
Energy-efficient building design (incl. codes)	GKSPL, FC, IGBC, NRDC, AEEE, SSEF	Yes				Yes	Yes
Finance and market instruments	CLASP, SJ, NRDC, SSEF				Yes	Yes	Yes
Other sectors: cold chain, transportation	AEEE			Yes			



### 3. Vision and Mission of India Cooling Coalition

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India Cooling Coalition is a multi-stakeholder network and platform that works with a wide range of key actors from government, international organizations, businesses, finance, academia, research organizations, and civil society groups to facilitate knowledge exchange, knowledge dissemination, and joint action towards sustainable cooling. During the previous phases (2016-19), the Coalition worked on space cooling elements in Buildings Design & Cooling technology, Standards and Codes, and Market Transformation. The Coalition, in its first phase, recommended and promoted the adoption of lean, mean, and green space cooling strategies for meeting India's thermal comfort needs.

With the launch of the India Cooling Action Plan (ICAP) in March 2019, the vision and mission of India Cooling Coalition have been re-defined with an overall objective of advancing the agenda of fast-tracking implementation of ICAP. The Vision and Mission of India Cooling Coalition are as follows:



#### Vision

Access to affordable and sustainable cooling in India in consonance with its development and climate goals.



#### Mission

Fast-track implementation of India Cooling Action Plan to ensure thermal comfort, health, and food security for all through knowledge exchange and policy interventions.



## 4. Goals of India Cooling Coalition

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### Endorse

- Advocate cooling as a critical area of focus especially in the backdrop of India's Nationally Determined Contribution (NDCs) under Paris Agreement as well as the Kigali Amendment to the Montreal Protocol and lend support to the prioritization of cooling agenda in the Indian policy framework
- Accelerate policy influence to highlight positive macro-economic and health benefits of sustainable space cooling & refrigeration post-COVID-19 pandemic.
- Advance India Cooling Coalition as the prime consortium and chief representative for leading national as well as global discussions on cooling.
- Establish effective information, communication amplification, and knowledge dissemination framework.
- Affirm to the commitments under the India Cooling Coalition Pledge (enclosed at [Annex-I](#)) for strengthening and accelerating the implementation of ICAP.

### Act

- Promote a rigorous, coordinated, and compelling narrative on the cooling challenge by regularly underlining the priority issues and different opportunities for action that evolve with time.
- Deliberate and discuss on furthering the envisioned objectives of ICAP and catalyzing the implementation of best practice policies and standards in the regulatory as well as market spheres.
- Strengthen intra-coalition coordination between different members and their domain expertise as well as inter-coalition coordination with international groups to supplement as well as complement the ongoing global and national efforts in cooling.
- Build on each member's reach, visibility, and credibility to build the synergies between government ministries, industries, think tanks, research, and academia academics which is imperative for the design and implementation of necessary interventions.



- Mobilize role of all coalition members as ICAP Ambassadors by
  - ♦ Developing awareness about ICAP and its relevance to different stakeholders including government organizations and industry players.
  - ♦ Facilitate implementation of ICAP by endorsing it in events, articles, op-eds, etc. as appropriate for a wider reach

### Knowledge Exchange

- Convening knowledge exchange forums on efficient, climate-friendly cooling; developing case studies, newsletters, and publications.
- Provide market data, information, technical expertise towards white papers and publications.
- Establish a platform for member organizations to present their research on cooling and get any required stakeholder consultations, peer review, or technical expertise.



## 5. Pledge of India Cooling Coalition

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To re-affirm commitments of the members of the Coalition for working jointly towards sustainable cooling and encourage stakeholders to adopt a pro-active and collaborative approach, all the members of India Cooling Coalition will need to endorse India Cooling Coalition pledge (enclosed at Annex-I). With this pledge, the Coalition members will catalyze a movement to achieve the Coalition's vision and work to successfully support the implementation of the ICAP through:

- Active support to all other members of the Coalition for taking up joint activities.
- Enabling knowledge sharing on key findings, initiatives, and milestones.
- Support the creation of the necessary policy framework required to accelerate implementation by providing expert inputs.
- Highlighting the co-benefits of sustainable cooling through awareness and outreach.
- Partnering with other stakeholders involved in the cooling sector domain to align with the sectoral recommendations of ICAP.



## 6. Activities of India Cooling Coalition

Through the set of activities carried out under the coalition's framework, India Cooling Coalition will establish itself as a strong and influential non-governmental platform, which supports India in strategically mitigating its developmental challenges (owing to the growing population, its demand for improved quality of life and economic growth) in line with various national and international commitments like India Cooling Action Plan (ICAP), the Kigali Amendment, Paris Agreement and Sustainable Development Goals.

The current set of activities has been listed based on the present funding period i.e. till 31<sup>st</sup> December 2020. The activities for the year 2021 will be defined based on the outcomes achieved in this year, inputs from ministries, and India Cooling Coalition members.

TABLE 2: ACTIVITIES OF PHASE III INDIA COOLING COALITION

Main Activity		Sub -Activities	Indicator	Outputs
SHORT TERM (up to 2 months)	ACHIEVING GREATER COLLABORATION AND VISIBILITY	Activity 1: Revisit and revise the Coalition Charter	Re-define the vision and mission of the India Cooling Coalition	Governance framework endorsed by all the members to achieve synergies for implementation of ICAP and improve the working mechanism of the Coalition
			Re-work the collective roles and responsibilities of the Coalition and their division amongst Coalition members	
		Activity 2: Enhancing the Visibility of the Coalition	Create a new, dedicated website (with newly designed logo) of the India Cooling Coalition to put forward a common narrative with a strong governance structure, promoting collaboration and advocating for innovation, investment, and information	Position the Coalition as a highly respected and sought-after partner for policymakers, business, and technological innovators
			Create social media handles for the Coalition to enable new conversations and drive different stakeholders towards forward-looking thoughts/ actions	

Main Activity		Sub -Activities	Indicator	Outputs
LONG TERM ACTIVITIES (up to 6months)	PUSHING THE AGENDA OF SUSTAINABLE COOLING AND ITS CROSS-BENEFITS IN INDIA	ACTIVITY 3: Demonstrate thought-leadership and subject matter expertise	Disseminating value-added commentaries on topical news and milestone policy announcements & publications	Developing an active community of knowledge exchange, policy support, and joint actions.
			Undertaking peer reviews and providing expert inputs towards	
			policies and initiatives within the cooling domain	
			Establishing the coalition as a non-governmental platform for providing expert inputs on matters related to cooling and refrigeration to international donors/funders	
			Enhancing collaboration with other coalitions (national as well as international) by engaging in knowledge exchange forums and common action plans for taking up sustainable cooling activities in India,	
		ACTIVITY 4: Secure government buy-in	Establishing strong buy-ins with policymakers and providing advisory support to accelerate the implementation of the India Cooling Action Plan	Seeking acknowledgement from policymakers to maintain and strengthen the relevance of the Coalition
		ACTIVITY 5: Outreach and Knowledge Dissemination	Organizing round tables, consultation and review workshops, webinars of various thematic areas related to cooling and refrigeration	Platform to bridge various stakeholders including international agencies, to develop common approaches and methodologies for accelerating sustainable use of cooling and refrigeration

## 7. Structure of India Cooling Coalition

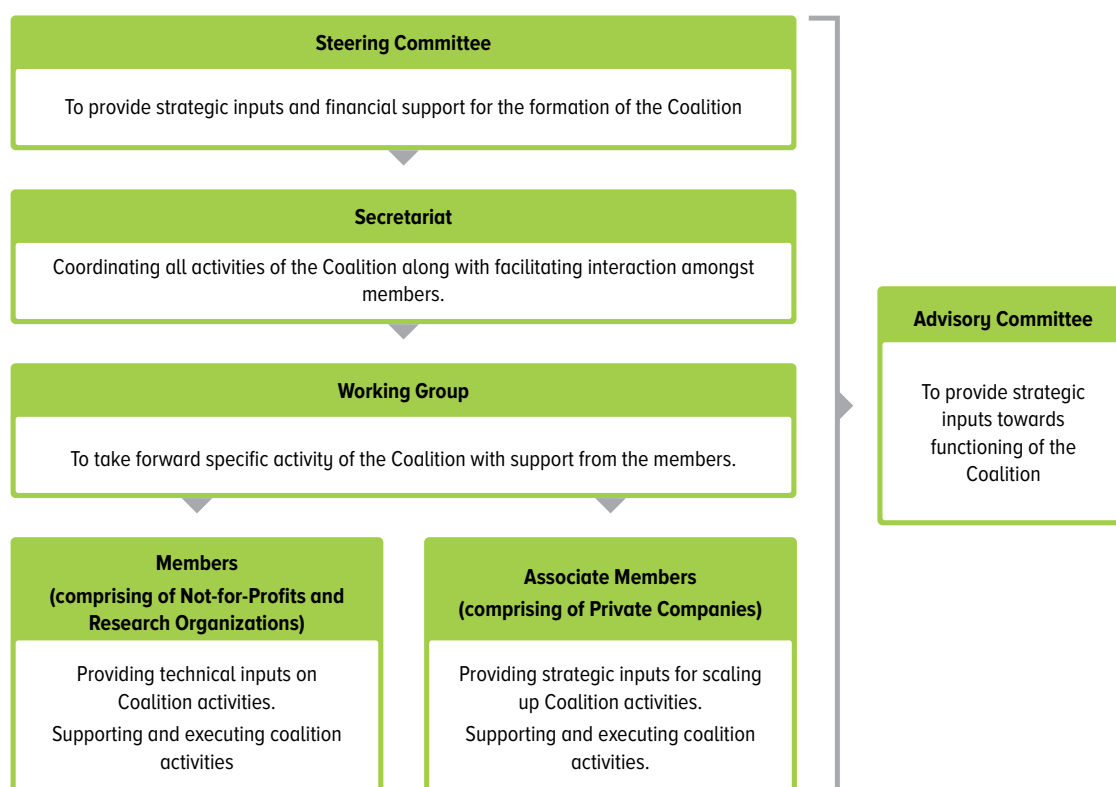


FIGURE 1: GOVERNANCE STRUCTURE OF INDIA COOLING COALITION

During the earlier phases as well as the ongoing phase of the India Cooling Coalition, Shakti Sustainable Energy Foundation (SSEF) has been the funder while Alliance for an Energy-Efficient Economy (AEEE) continues to be the Secretariat.

For the Phase-III, the activities of India Cooling Coalition will be formulated and governed through a Steering Committee which will be providing all the strategic inputs. These activities will be further implemented by Working Groups. The Working groups will involve Members as well as Associate Members to take forward specific activity. The following non-profit organizations, who have been part of the Sustainable and Smart Space Cooling Coalition are being invited as Members to establish India Cooling Coalition:

- I. Council on Energy, Environment, and Water (CEEW)
- II. CEPT University (CEPT)

- III. CLASP
- IV. Centre for Policy Research (CPR)
- V. Glazing Society of India (GSI)
- VI. India Green Building Council (IGBC)
- VII. Indian Society of Heating Refrigerating and Air-Conditioning Engineers (ISHRAE)
- VIII. International Council for Local Environmental Initiatives (ICLEI)
- IX. Malaviya National Institute of Technology Jaipur (MNIT)
- X. Natural Resources Defense Council (NRDC)
- XI. Prayas (Energy) Group
- XII. The Energy Resources Institute (TERI)
- XIII. World Resources Institute, India (*new invitee*)
- XIV. Center for Study of Science, Technology and Policy – (CSTEP) (*new invitee*)
- XV. The Climate Group (*new invitee*)
- XVI. University of Birmingham India Institute (*new invitee*)
- XVII. Centre for Environment Education (CEE) (*new invitee*)

The following organizations with strong track record and body of work in the cooling and refrigeration space are being invited to become Associate Members of India Cooling Coalition:

- I. Fair Conditioning
- II. Greentech Knowledge Solutions Pvt. Ltd (GKSPL)
- III. Smart Joules
- IV. Environmental Design Solutions (*new invitee*)

The organization running the Secretariat of India Cooling Coalition will be selected for one year by the members of the coalition. The necessary support for the handover of activities will be provided by the erstwhile Secretariat to enable the smooth functioning of India Cooling Coalition.

To achieve further clarity on the roles and responsibilities of the Steering Committee, Funding Agency, Secretariat and Members of the Coalition along with the code of conduct of the coalition, the Governance Structure of India Cooling Coalition has been formulated and will be adopted post consensus of all the members.

### **Criteria for Becoming a Member of India Cooling Coalition**

Organizations based on the following criteria will be designated as Members and Associate members of the Coalition:

- Not-for-profit organizations, think-tanks, academia, and research organizations having sound credentials in cooling or related areas where cooling will have a major role or strong interest in cooling will be treated as “Members”.
- Selected private sector players or companies that have a strong track record of working and contributing to cooling/refrigeration for enhanced public/general understanding can be invited to participate as “Associate Members”. The organization will become a member only after the consensus of existing members of India Cooling Coalition.



Members joining the Coalition will provide a Letter of Consent to the Secretariat of India Cooling Coalition as per format enclosed at [Annex-II](#), for expressing their willingness to join as a member of India Cooling Coalition.

### **Approach for Reaching out to New Members and/or Coalitions**

- The Coalition will be reaching out to new Organizations based on recommendations by the Existing Members of the Coalition or the Advisory Committee. The Secretariat will initiate communications with the proposed Organizations with support from the members to secure their commitment to join the Coalition. Organizations will be encouraged to contribute in taking forward the goals and objectives of India Cooling Coalition,
- For establishing collaborations with other Coalitions who are working in the same ambient both nationally and internationally, the Secretariat will be initiating communications with support from the members. Identification of key focus areas and activities of the other Coalitions along with possible areas of synergies will be mapped before initiation of communication with other Coalitions.

### **Meetings of India Cooling Coalition**

- The Coalition shall meet at least quarterly while the Working Groups shall meet at least once every other month and at such other times as the members of the Coalition shall require.
- Meetings of the Coalition shall be called by the Secretariat.
- Unless otherwise agreed, a notice of each meeting confirming the venue, date and time, together with an agenda of items to be discussed, shall be forwarded to each member and any other person required to attend, no later than two (2) weeks before the date of the meeting. Supporting documents or ready reckoners will be sent to members and other attendees as appropriate, at the same time.
- The Secretariat shall minute the proceedings and resolutions of all meetings, including the names of those present, absent, and in attendance. The minutes shall be circulated within 1 week of the meeting on the Coalition's Google Group and members are expected to adhere to the timelines for responding to the intended action items.
- The Chair shall ascertain, at the beginning of each meeting, the existence of any conflicts of interest and minute them accordingly.
- Minutes of committee meetings shall be circulated in draft form promptly to all members and, once agreed and signed by the chairperson, to all members unless a conflict of interest exists.

### **Decision-Making Process**

- All the decisions made by India Cooling Coalition and the Working groups (if any) will be adopted post voting carried out within the members.
- The administration of funds for Coalition activities will be managed by the Secretariat and requires the consent of the Steering Committee.



## Annex – I The Cooling Action Pledge

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We, the members of India Cooling Coalition, hereby pledge to support the following activities to help India transition to a sustainable cooling future:

- To provide Thermal Comfort for All using passive cooling and energy-efficient refrigerant and non-refrigerant cooling technologies; to particularly enable comfortable habitat for the Economically Weaker Section (EWS) and Lower Income Groups (LIG) segments using targeted policies and programmes
- To support the socio-economic co-benefits of sustainable cooling like better livelihoods and the creation of ‘green’ jobs across cooling equipment manufacturing, refrigeration and air-conditioning service sector, indigenous refrigerant production, and R&D in advance cooling technologies.
- To advocate the Lean-Mean-Green hierarchical approach to cooling i.e. a combination of passive cooling to reduce cooling loads in buildings, and energy-efficient active cooling technologies to meet the reduced cooling loads.
- Support clean and environment-friendly cold chain development to improve India’s agricultural logistics and the healthcare system.
- Promote clean and environment-friendly cooling for the transport sector.
- To become the connecting bridge between the national and sub-national actors including urban local bodies, to deliver the full potential sustainable cooling policies & programs.
- To collate and analyze emerging research in sustainable cooling and create new knowledge products to support decision-making.





## Annex – II Letter of Consent To Become Member of India Cooling Coalition

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<ON THE LETTERHEAD OF THE ORGANIZATION>

To,

Secretariat – India Cooling Coalition

*<Name of the Organization>* has consented to become a member of India Cooling Coalition. Our organization agrees with the vision, mission, goals, activities as mentioned in the Charter along with the operating procedures as stated in the Governance Document. To facilitate our active participation, *<Name of the Organization>*:

- is appointing *<Name of the Official>* as the nodal person from our organization to attend coalition meetings and participate in its activities.
- will keep the Coalition informed about *<Name of Organization>*'s initiatives towards facilitating the implementation of India Cooling Action Plan.
- Will keep abreast of coalition activities by reviewing minutes, reports, communications, and by providing feedback and comments.

