



Semiconductor
Climate Consortium

Innovating

Towards A Sustainable Future



**Semiconductor
Climate
Consortium**



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Climate Consortium

Semiconductor Climate Consortium

Prospectus

September 2022

SUSTAINABILITY

CONNECT - COLLABORATE - INNOVATE - GROW - PROSPER



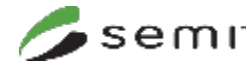
Semiconductor
Climate Consortium

The Semiconductor Climate Consortium drives progressive climate action through collaboration and alignment, measuring and reporting, and setting ambitious target for Net Zero to keep global climate change within 1.5°C.

Do you Share this Mission and Vision?

Join Us.

We are currently accepting Founding Members through October 21, 2022



Why a Semiconductor Climate Consortium?

Our Shared Values

While environment and social impact have become the priorities for many industries, individual businesses are realizing that industry level collaboration is necessary to drive change with speed and scalability.

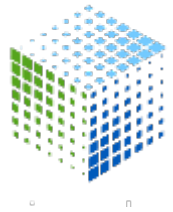
Members of the Semiconductor Climate Consortium recognize the challenge of climate change and the role our industry can play in reducing greenhouse gas emissions, in our own operations, our value chain, and other industries through the technologies we enable.

We believe member companies with accumulated knowledge and innovative technologies, working collaboratively, will accelerate the efforts toward solving environmental challenges which cannot be addressed by any company alone.

Members agree to support the Paris Agreement and related accords driving the 1.5°C pathway and are aligned on the need to drive climate progress within our industry.



We welcome companies in the semiconductor ecosystem companies who will join us in making these commitments*



Support

Join the SCC and support the Paris Agreement and related accords driving the 1.5°C pathway and align on the need to drive climate progress within our industry.



Collaboration

Align on common approaches to continuously improve and reduce greenhouse gas emissions in the semiconductor industry value chain



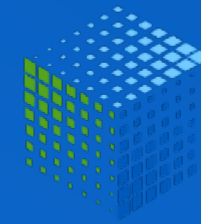
Transparency

Publicly report progress and Scope 1, 2, & 3 GHG emissions annually according to the guidelines and principles in the GHG Protocol and agree to key underlying assumptions



Ambition

Set near-term and long-term targets in accordance with best available science, with the aim to reach Net Zero greenhouse gas emissions per the GHG Protocol no later than 2050



Value Proposition

The Semiconductor Climate Consortium is the first global, ecosystem-wide effort to accelerate the semiconductor ecosystem's response to the challenge of climate change by facilitating our member's responses in reducing greenhouse gas emissions.

Members collaborate on dependencies for evaluating Scopes 1-3, help develop and get first access to tools to assist reporting and baselining, and help build the case for change with our stakeholders. Modeled after the success of the Fashion Pact, we will improve our industry's climate response with a quantitative and qualitative approach.

We also support innovative ideas utilizing microelectronics to combat climate change and partner with outside organizations to raise awareness of opportunities and best-known methods across all industries.

Outreach and Engagement

The SCC is reaching out to many other organizations that share climate change ambitions and exploring engagement opportunities, including:

- **Semiconductor Industry Association (SIA)** – regular communication to complement each other's efforts
- **McKinsey & Co.** – SCC knowledge partner in formation and certain deliverables
- **SBTi** – The SBTi defines and promotes best practice in science-based target setting
 - We wish to include semiconductor value chain sector in their database
- **Climate Equity Consortium** – climate justice and climate equity initiatives
- **UNFCC** – The United Nations Framework Convention on Climate Change established an international environmental treaty to combat "dangerous human interference with the climate system", in part by stabilizing greenhouse gas concentrations in the atmosphere
- **COP27** – The SCC will announce its formation and highlight the steps the industry has pledged to support the Paris Agreement at COP27
- **WEF** – The World Economic Forum is an independent international organization committed to improving the state of the world by engaging business
- **WEI** – The Women's Environmental Institute is an environmental research, renewal and retreat center designed to create and share knowledge

Benefits

- Collaborate on industry value chain goals on reducing GHG emissions
- Strengthen your Materiality assessment with industry associations and value chain
- Learn how other companies in our value chain are responding to the climate crisis
- Develop tools for the entire industry value chain
- Build a network of peers working on the same issues as you
- Surface your pain points, engage toward common solutions
- Increase your influence through a shared consortium voice

Activities

Climate Impact Tools

- Evaluation of climate related risks on semiconductor value chain
- Quantification of semiconductor sector impact
- Business analytics for better decision-making

Reporting Standards

- Provide simplified guidelines for Scope 1, 2, 3 reporting to encourage transparency in the value chain
- Provide market intelligence to stay aligned with disclosure requirements

Technical Workstreams

- Demystify Scope 3 calculations & reports
- Identify infrastructure and process improvements (Scope 1 impacts)
- Support start-ups and innovation

Outreach

- Active member engagement
- Support ESG journey in our value chain
- Partner with NGOs, and local and global Communities
- Partner with NGOs, local and global communities, promote climate equity

Proposed Deliverables*

Fast-Start Activities

Launch Semiconductor Climate Consortium at COP27
8 – 11 Nov, 2022

Create and use guidelines to standardize reporting
for Scope 1, 2, 3 in the value chain

Establish Business Analytics for semiconductor
carbon footprint and renewable energy roadmap in
the value chain

Evaluation of climate related risks on semiconductor
value chain

Outreach: Engage with UNFCC, WEF, SBTi, WRI
(and others) to raise their awareness of the
semiconductor sector value chain. Evaluate
opportunities to promote climate equity

Collective responses to regulatory requirements
Sharing of available resources on incentives, taxes
and disclosure

Second Priority Activities

Access the Innovators: 1) provide a funnel for Clean
Tech startups to members (S3); 2) Generate playbook
for startups' proof of concept

Fund and guide the development of Market
Intelligence and Resource for SCC members

Collaborate with SEMI Smart Manufacturing for
sustainability solutions in manufacturing. Examples:
1) Provide a platform for manufacturing efficiencies
with real time decision making; or
2) Expedite development and deployment of smart
communication between equipment

Create a collection of best practices and solutions

Formalize industry responses to government policy
groups & advocacy activities: regional clean energy
access; regulatory policy mtgs; disclosure, carbon
tax, incentives, taxonomy

Third Priority Activities

Expand to include Energy Group to accelerate the
accessibility for renewables, low-carbon energy,
sharing of local resources, providers, developers in
the value chain

Develop and deploy predictive Climate Risk
assessments calculator and impact on
semiconductor value chain

Deploy predictive analytics and reports against
roadmap to 2030 & 2050

Annual reporting on overall semiconductor value
chain climate performance

Reach beyond our sector to help solution
sustainability issues in other industry

Support pre-competitive research for discovery and
deployment of alternate gases for our current high
GWP GHGs

*Note: Actual objectives, deliverables, timelines and final priorities to be determined by the Consortium Leadership Level members in Q1 2023

SCC Proposed Workstreams

1. **Climate Consortium Formation** – Led by ASM International-John Golightly, SEMI-Mousumi Bhat
(Origin of SCC Mission, Vision, Structure)
2. **Baselining, Ambition Setting and Road mapping** – Led by ASML-Marijn Vervoorn
3. **Value Chain GHG Scope 1 – Reporting Protocols** – Led by EMD-Mary Majors and Schneider Electric-Gregg Morasca
4. **Value Chain GHG Scope 2 – Reporting Protocols** – Led by and EMD-Mary Majors and Schneider Electric-Gregg Morasca
5. **GHG Category 11 – Scope 3** – Led by Intel-James Larsen; Applied Materials-Elena Kocherosky
6. **Component Sustainability Scoring** – Led by Applied Materials-Ben Gross
7. **Scope 1 High GWP GHG** – Led by SEMI-Mousumi Bhat
8. **Semiconductor Sustainability Startups** – Led by Merck-Sarah Luppino

Deliverables & Tasks

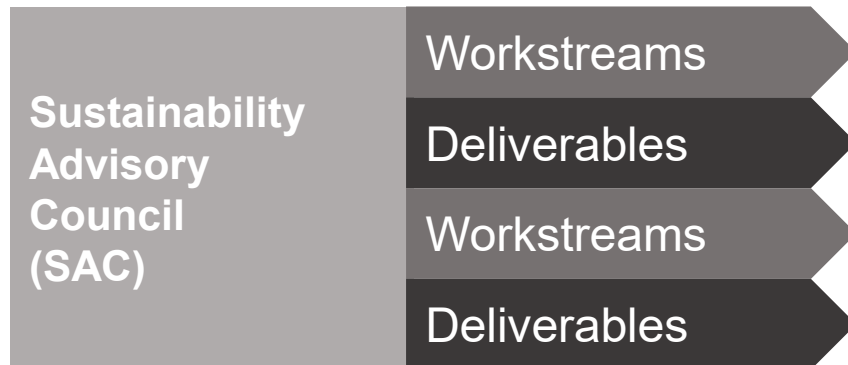
- The work is driven and led by Working Groups composed of Member Representatives
- SCC tasks are executed by a combination of staff, consultants, and company personnel, as appropriate

*Note: Actual workstream assignments, objectives, deliverables, timelines and final priorities to be determined by the Consortium Leadership Level Members and SAC in Q1 2023

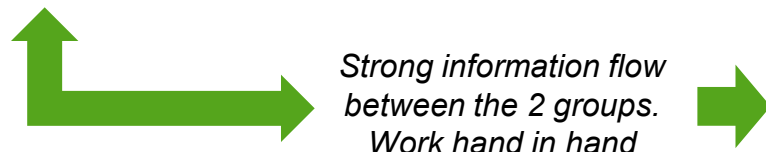
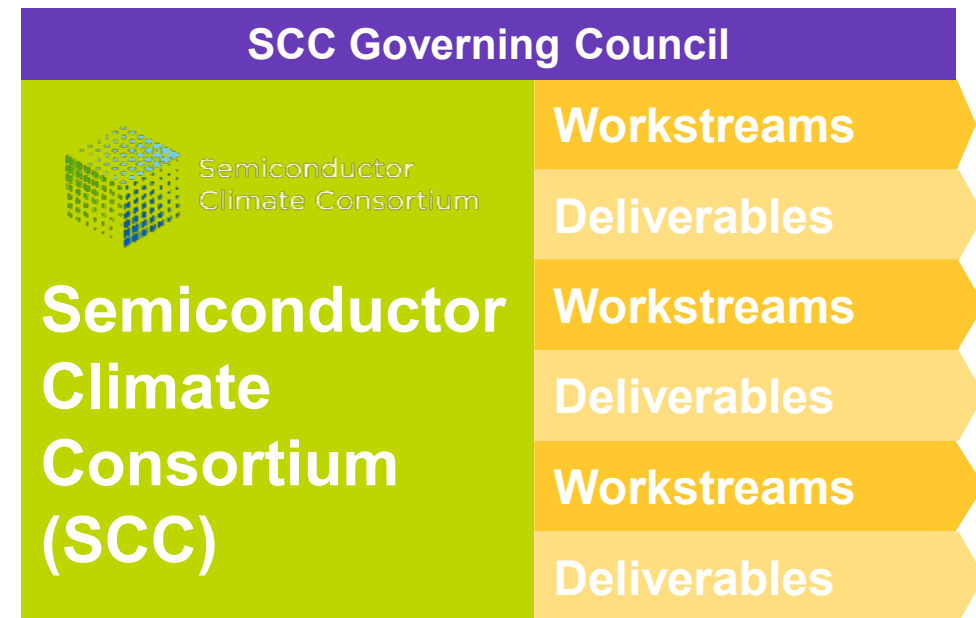
The SCC Operates Complementarily with the SEMI Sustainability Advisory Council (SAC)

SEMI Sustainability Initiative

Addressing non-climate environmental and other ESG topics



Addressing Climate Policy, Risk, Energy, Emissions & Outreach



SCC Structure & Governance

SEMI SCC Consortium Management

- Dedicated Consortium Manager
- WG & Project Support, Legal support mgmt.
- Communications and marketing
- G&A Support

SCC Governing Council

- 7 members from different segments of the semiconductor ecosystem
- Annual nominations/elections from Leadership Level Members
- Governing Council chooses Chair & Co-Chair
- Defines Agenda, Objectives, Support for Working Groups

Members

- Multiple POCs at any company
- Populate Working Groups
- Leadership level members nominate and vote for GC members
- Participant Level eligible to engage on Working Groups

Workstreams

Deliverables

Workstreams

Deliverables

Workstreams

Deliverables

Compare Membership Levels

Leadership Level

- Inaugural year fees:
 - \$40,000 SEMI Members
 - \$50,000 Non-SEMI Members
- Fees reassessed each year based on work plan
- Eligible to vote for Governing Council members
- Eligible to serve on Governing Council
 - Determine objectives, deliverables and recommend spend
- Eligible to Chair Working Groups
- Priority Access to thought-leadership and lobbying engagements
- Eligible to use the SCC logo on marketing and branding materials

Participant Level

- Inaugural year fees: \$15,000
 - Fees reassessed each year based on work plan
- Eligible to participate in Working Groups
 - Not eligible to Chair
- Eligible to use the SCC logo on marketing and branding materials

Founding Member (FM)

- Both Leadership and Participant Members are eligible to be designated as Founding Members
- Must provide commitment to join before October 21, 2022
- FMs are eligible to utilize the special Founding Member logo

Branding & Marketing

Semiconductor Climate Consortium members align with this important Sustainability effort, including authorized usage of the logo. Usage provides visually appealing recognition for your efforts to address impact on the world's climate and support for innovative approaches to reducing GHG and the impact of climate change.



Join the Semiconductor Climate Consortium today.
Ask me how.



Email Signature Line – link to <https://www.semi.org/en/industry-groups/sustainability-climate-consortium>



Semiconductor Climate Consortium

Become a Founding Member of the Semiconductor Climate Consortium
by joining before 10/21/22.
Click here for more information

managed by 



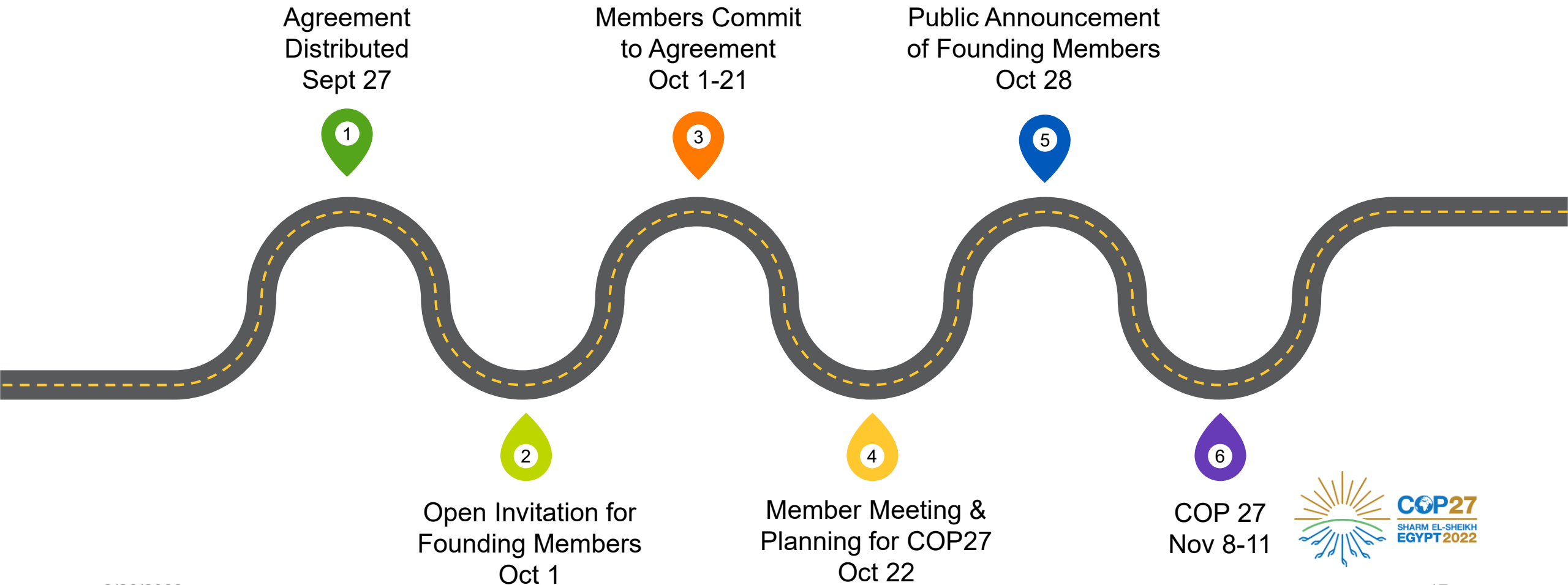


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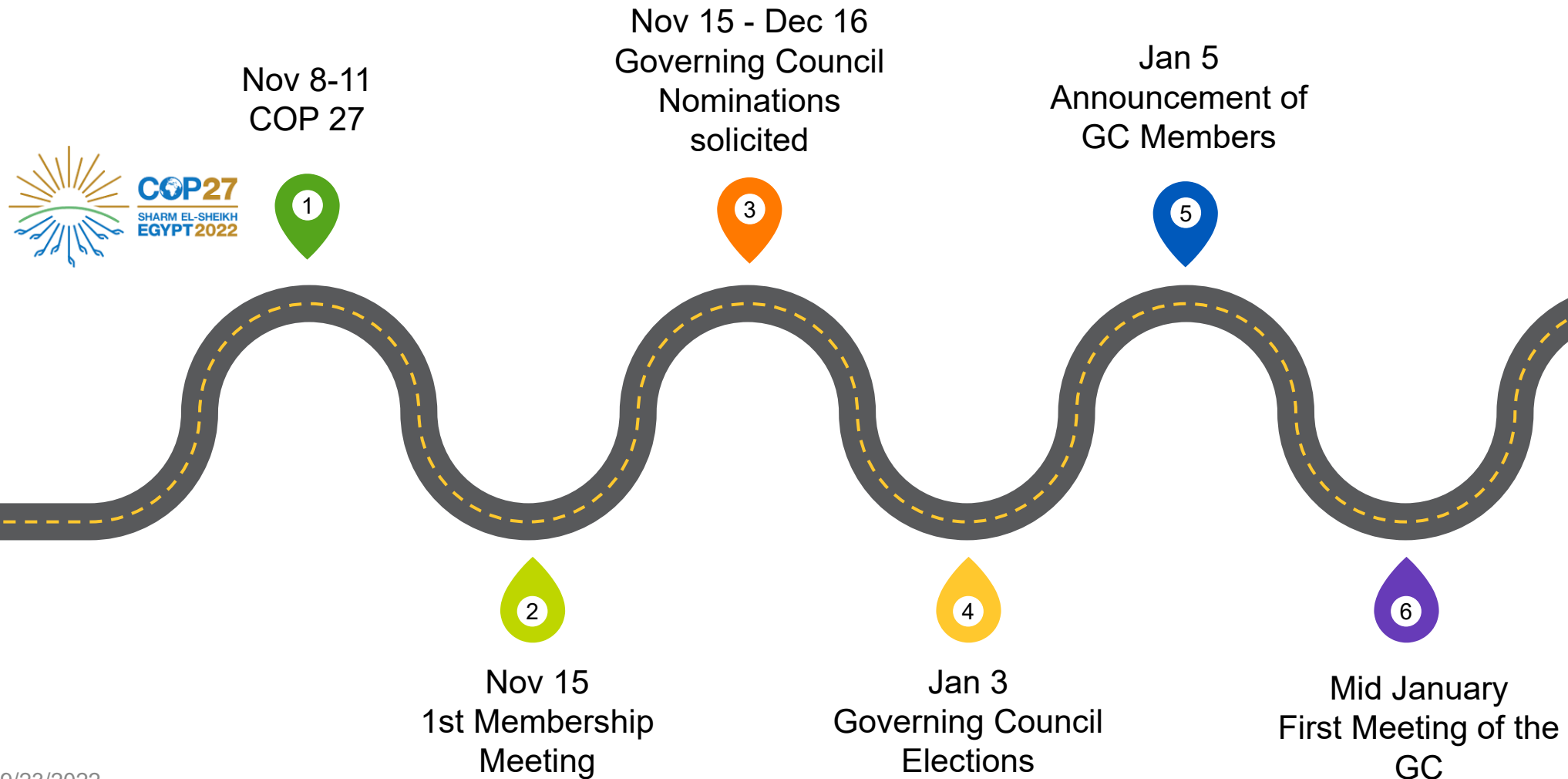
Ready to Join?



Timeline through November 8



Timeline after November 8



How to Become a Founding Member

1. Review the Benefits and Operations of the Semiconductor Climate Consortium as detailed in the [Agreement](#)
 - Commit by Oct. 21st to earn “Founding Member” status
 - Hold meetings as necessary with SEMI Staff (or SCC Member) to discuss engagement
2. Membership Fees
 - \$40K for Year 1 **Leadership Level Membership** for full participation and voting rights
 - \$50K for Non-SEMI Members (or SEMI Members in arrears)
 - \$15K for Year 1 **Participant Level Membership** for participation in working groups
3. Sign & Return the [Agreement](#) to Aditi Gowda @ scc@semi.org

What Happens Next

- Establish primary contact and points of contact for Working Group activity
- Determine role at COP27 and related announcement
- Founding Members will meet ~Oct. 22
- Share on Social Media your support for the Founding of the SCC (optional)



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Become a **Founding Member** by returning a completed agreement by Oct 21 and be recognized as such by all announcement and launch activities, including at COP27.

Founding Members receive that designation in Semiconductor Climate Consortium marketing and branding information where appropriate, until the Governing Council determines otherwise.

[Download the Agreement](#)



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FOUNDING MEMBER



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THANK YOU

[SCC Website](#)

[SCC FAQ](#)

SUSTAINABILITY

The SCC Grew Out of the SEMI Sustainability Initiative

STEERING COMMITTEES

- Global Sustainability Advisory Council
- Europe
- Asia
- Americas

ECOSYSTEM PARTNERS

- LCA Providers
- Investors
- Policy Stewards
- Other Sustainability Associations

WORKING GROUPS

- Ambition Setting & Baselineing
- Materiality Assessment
- Industry Pact
- Scope 3 Emissions
- Component Sustainability Standards

STAKEHOLDERS

- Chipmakers
- Equipment suppliers
- Chemical & Gases
- Research Institutes

SUSTAINABILITY INITIATIVE MEMBERS

KNOWLEDGE PARTNER