Linking green and sustainable chemistry with the Global Framework on Chemicals and the Stockholm Convention

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Stockholm Convention	**Green & Sustainable Chemistry**	**Global Framework on Chemicals**
Eliminate and reduce POPs	Design safer chemicals, materials, products and processes	Achieve the sound management of chemicals and waste and prevent harm
Promote BAT/BEP and safer alternatives	Innovation across the full life cycle of chemicals and products	Supports Strategic Objective D and Target E2
Strengthen national implementation and compliance	Engages industry, researchers, governments and investors	Accelerates action across sectors and value chains
Reduce risks to human health and the environment	Creates opportunities for sustainable investment and green markets	Contributes to sustainable development and circularity

GSC Expert Group convened by UNEP

The general objective of the GSC expert group is to **promote Strategic Objective D** with all its Targets and **Target E2 of the GFC**.

The specific objective of the GSC expert group is to **promote the empowerment of and enable individual actors in value chains in high-impact sectors in the implementation of green and sustainable chemistry (GSC)**, in accordance with UNEP's 10 Objectives and Guiding Considerations for Green and Sustainable Chemistry. GSC implementation includes approaches, pathways, methods and solutions with respect to the design, management and use of chemicals, processes and products and chemical services.

By the First International Conference (IC1) of the GFC, the group aims to deliver:

- A **draft global roadmap for integrating green and sustainable chemistry into the GFC sectors**
- An initial **mapping of initiatives adhering to green and sustainable chemistry principles** by various stakeholders
- Host a **“GSC corner” at IC1**, aiming to enable stakeholders to learn from, and discuss with each other

Structure

Global Framework on Chemicals (GFC)

Green and Sustainable Chemistry (GSC) Workstream

- Aims to **support the implementation of the GFC through the uptake of GSC practices**

GSC Expert Group (EG)

- **Informal, open-ended and agile technical working group** (>100 experts across stakeholder groups, geographies)
- Intents to **support the IOMC industry sector programmes**
- **Reviews and provides input to outputs/deliverables**

GSC Core Drafting Group (CDG)

- **Voluntary sub-group of GSC Expert Group** (currently 17 members)
- **Drafts outputs/deliverables**

Chairperson

- **Voluntary** engagement, on a 2-4 month rotation basis
- **Coordinates GSC CDG and interaction with GSC EG**
- **Leads/Coordinates drafting of outputs/deliverables**

Cross-cutting Workstreams

Chemical footprint;
Indicators & Measurability, ...

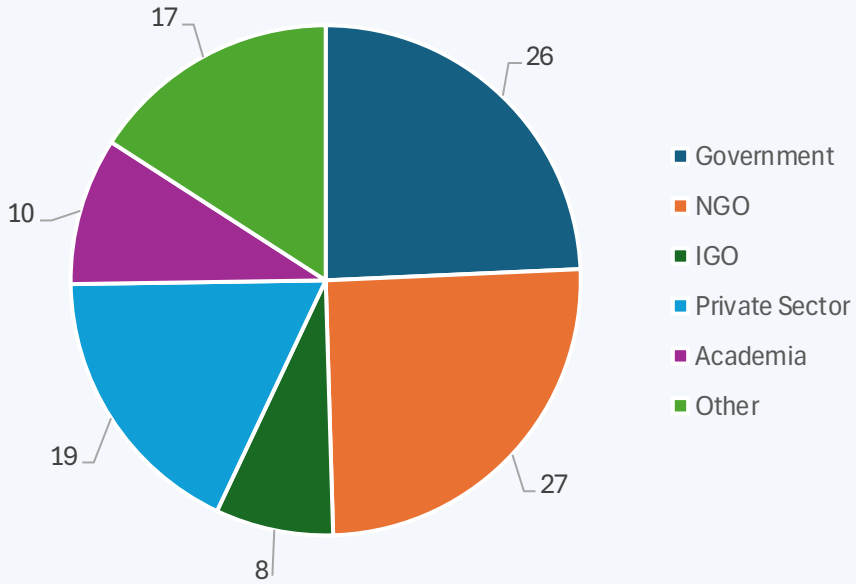
Sectoral Workstreams

Electronics; Construction; Textiles; ...

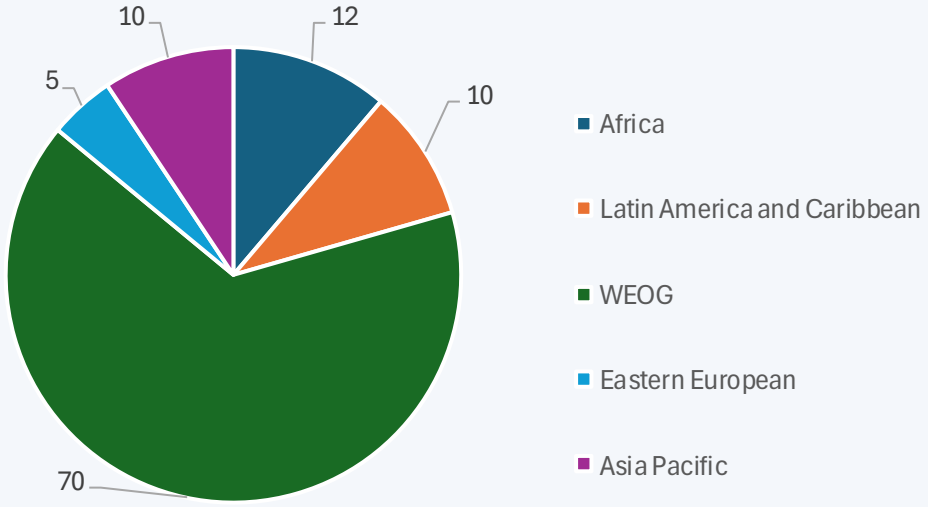
Stakeholder involvement

Representation (Working Group, 107 members)

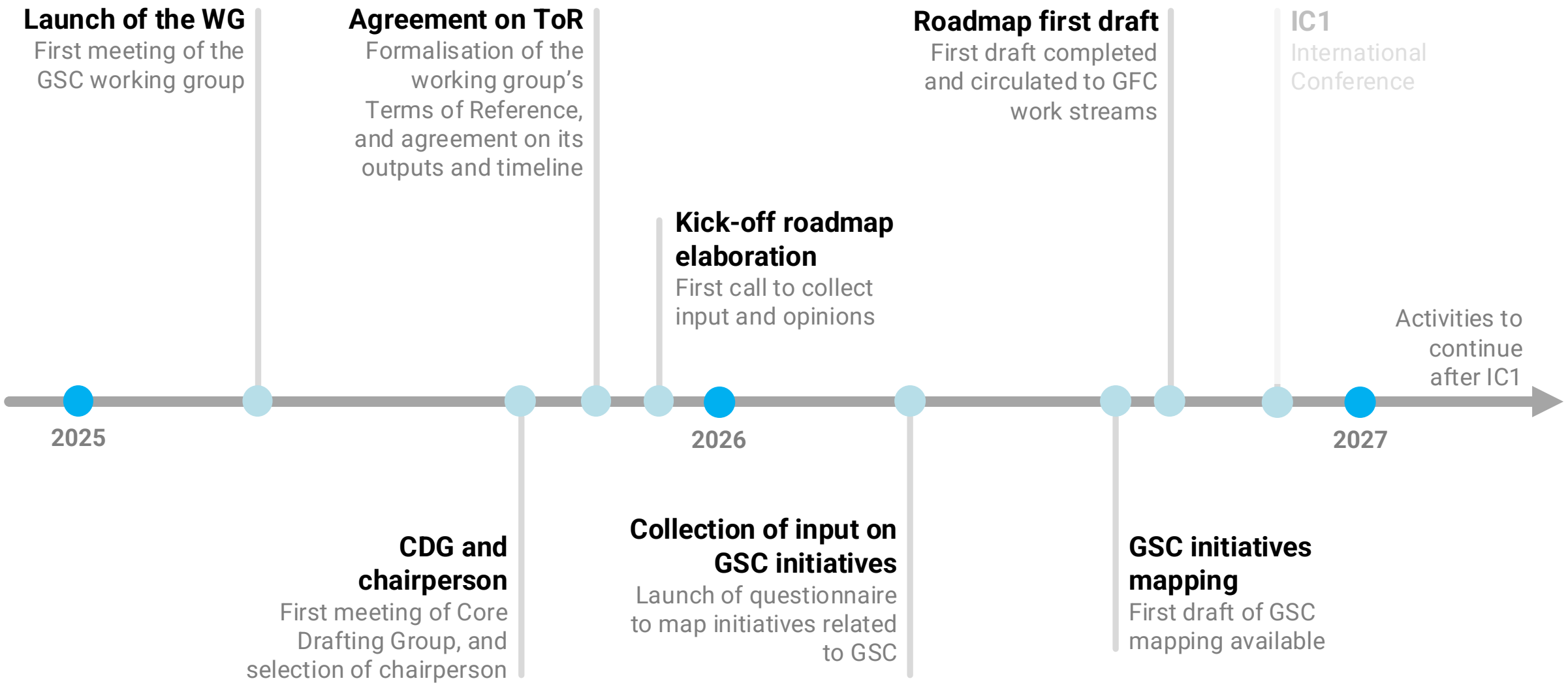
Stakeholer Type (# of people)



Stakeholer Region (# of people)



Milestones


Launch of the WG
First meeting of the GSC working group
Agreement on ToR
Formalisation of the working group's Terms of Reference, and agreement on its outputs and timeline
Kick-off roadmap elaboration
First call to collect input and opinions
Roadmap first draft
First draft completed and circulated to GFC work streams
IC1
International Conference
Activities to continue after IC1
2025
2026
2027
CDG and chairperson
First meeting of Core Drafting Group, and selection of chairperson
Collection of input on GSC initiatives
Launch of questionnaire to map initiatives related to GSC
GSC initiatives mapping
First draft of GSC mapping available

Draft Global GSC Roadmap – Four Themes and Key Action Areas

Compiling action areas and priority actions to accelerate the development and implementation of Green and Sustainable Chemistry.

The Global GSC Roadmap builds on and strengthens existing international, regional and national initiatives, with a focus on implementation.

Theme 1
GSC innovation from laboratory to industrial application

What it enables

Generate, validate and scale safer and more sustainable solutions.

Key action areas

- Incentives across the pathway from research to market
- Shared infrastructure and pilot facilities
- Entrepreneur and innovation support
- Matchmaking and partnership platforms
- Criteria and performance metrics

Theme 2
GSC strategies in value chains and sectors

What it enables

Create the policy, demand and collaboration needed for adoption and market transformation.

Key action areas

- Enabling policy frameworks
- Sectoral roadmaps
- Innovation and substitution clusters
- Support for SMEs and LMICs
- Safety and sustainability data
- Chemical-use information

Theme 3
Knowledge, evidence and education

What it enables

Build the evidence, awareness and skills for GSC practice.

Key action areas

- Evidence base and data generation
- Formal and informal education
- Professional and lifelong learning

Theme 4
Financing Green and Sustainable Chemistry

What it enables

Align public, private and blended capital along the pathway.

Key action areas

- Public finance and incentives
- Private and blended capital
- Investment signals, metrics and disclosure

Cross-cutting enablers

Coordinate delivery through existing structures and strengthen the conditions for implementation.

Leadership and governance
Clarify responsibilities at national, regional and global levels.

Coordination and partnerships
Connect policy, industry, research, finance and civil society.

Existing structures and networks
Map and connect initiatives; address gaps and overlaps.

Inclusive implementation
Adapt support to capacities; include LMICs, SMEs and underrepresented groups.

Communication and advocacy
Use shared evidence and messages tailored to each audience.

Stakeholder mobilisation

Concrete first moves need to be refined with stakeholder groups.

Governments
Pilot GSC procurement criteria and convene inter-ministerial coordination.

Industry
Apply benchmarking and disclosure; substitute one identified substance of concern.

Finance actors
Co-develop investment metrics and support early-stage GSC ventures.

Research and academia
Embed GSC and toxicology in curricula; open validation facilities to start-ups.

Intergovernmental organisations
Align sector guidance and match innovators with industrial needs.

Civil society
Communicate the evidence and help track stakeholder commitments.

Green and Sustainable Chemistry at IC1

GSC corner

A place to exchange, discuss, and learn

Monday – Wednesday, 16-18 November

Monday	Tuesday	Wednesday
Pillar 1 – Innovation "From principle to product"	**Pillar 2 – Education** "Teaching the chemistry of tomorrow"	**Pillar 3 – Supply chains** "Greening the value chain"

GSC Spotlight

Panel discussion covering the three themes of the GFC – Tracking Progress; Accelerating Action; Investing for Impact

Tuesday, November 17, 18:00 - 19:00, Salle B

Engagement – How can others join or support?

Looking forward to joining the **Green and Sustainable Chemistry (GSC) Corner** at the first International Conference of the Global Framework on Chemicals (GFC IC-1) in Geneva!

From **16–18 November, the GSC Corner** will provide a space for exchange and discussion on innovation, education and supply chains, exploring practical ways to advance Green and Sustainable Chemistry.

The **draft Global GSC Stakeholder Roadmap is NOW open for consultation**. **SCAN the QR code** to access the document and submit your comments and proposals.

Join the conversation!

We welcome **comments and proposals** on the **Global GSC Stakeholder Roadmap** and expressions of interest from those wishing to **join and contribute to the GSC Expert Group**.

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UN environment programme

Thank you for your attention

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