



Life Cycle Initiative

Global LCA Developments



The Life Cycle Initiative
Knowledge
for a
sustainable
world

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UN Environment

BRACV

FÓRUM BRASILEIRO DE ACV
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Life Cycle Initiative

Why Life Cycle Thinking?

Life Cycle Thinking is essential for
Sustainable Consumption and Production (SCP)

- Key Principle of SCP
- System thinking to address burden shifting

Principle



- Identification and prioritization of policies and practices to deliver Resource Efficiency & SCP

Pathfinder

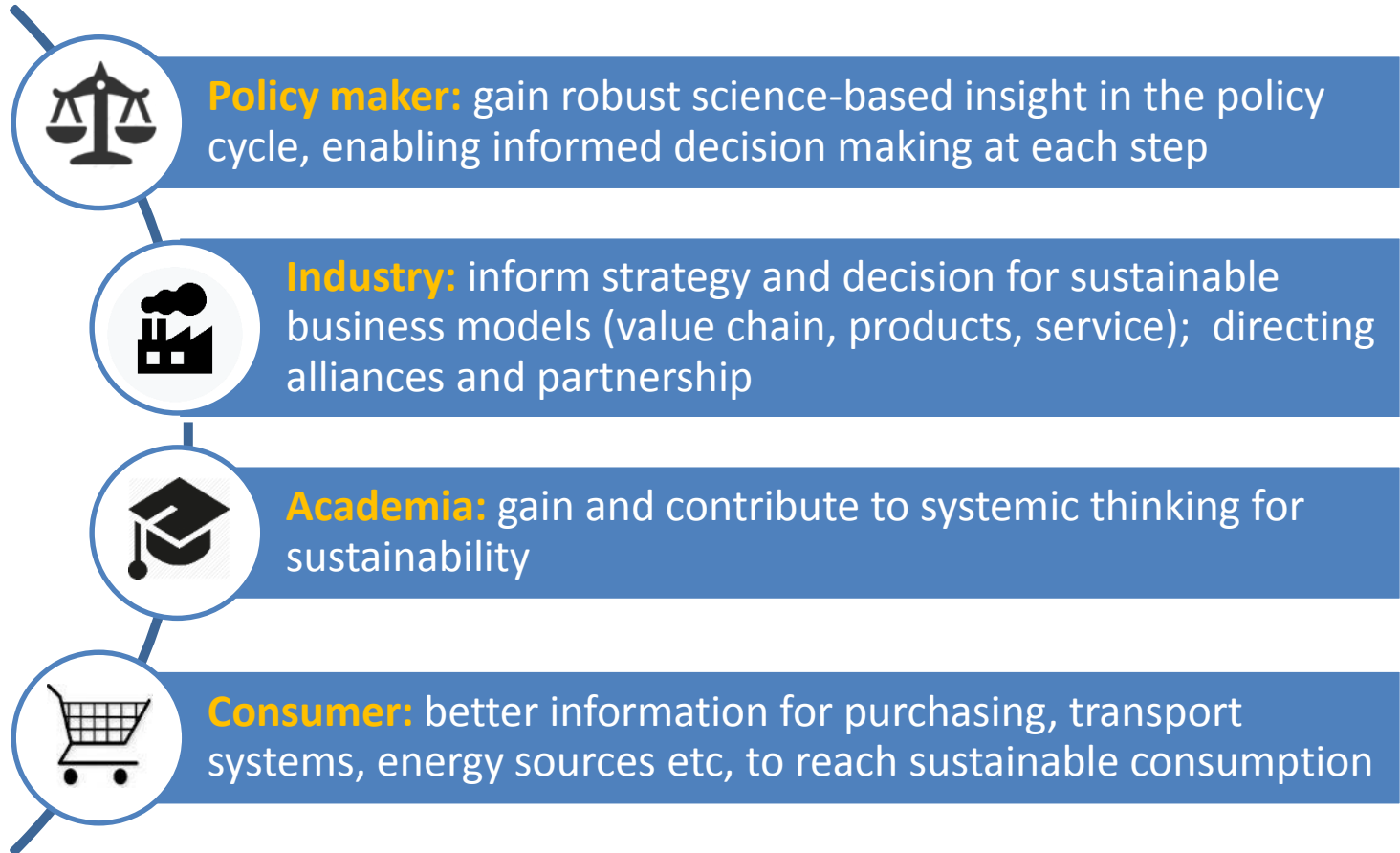


- Accurate impact measurement
- Highlight potential trade-offs
- Compare alternatives

Function



Why Life Cycle Thinking?





Life Cycle Thinking and Resource Efficiency

- “Life cycle approaches are critical to understanding resource interactions” (IRP, 2017); they point to **drivers of inefficiency** and **potential trade-offs**
- Link clearly identified in recent G7 and G20 reports
 - “Life cycle approach and policy coherence could be explicitly supported by the G7” (OECD, 2016)
 - Procurement (private and public) and eco-labels: tools to advance Resource Efficiency, requiring life cycle approaches (access to data; harmonization)
 - USEPA workshop (2016): “the G7 should continue conversations on resource efficiency and life cycle thinking topics and **use existing international mechanisms (e.g., UNEP, WBCSD, etc.) to promote standardized nomenclature, encourage disclosure of and access to resource efficiency data and information, and share best practices**”





Life Cycle Thinking and Circular Economy

- Life Cycle Thinking provides **robust science-based insights** to Circular Economy options
 - When are different business model options more adequate? Material recovery vs. product life extension vs. service-based systems...
- Identification of **potential trade-offs** and insight into ways to address them
 - E.g. build-up of toxic substances in materials' cycles; benefits of recycling cancelled by extra energy used



Agenda for Sustainable Development

Life Cycle Knowledge is **relevant to many Sustainable Development Goals** and other **global agendas** (Resource Efficiency, Pollution, Climate Change...)





2/8. Sustainable consumption and production

*The United Nations Environment Assembly**Recalling General Assembly resolution 66/288 of 27 July 2012, on the outcome document of the United Nations Conference on Sustainable Development, entitled "The future we want", in particular those paragraphs relevant to sustainable consumption and production, and recognizing that fundamental changes in the way societies consume and produce are indispensable for achieving global sustainable development,**Recalling also General Assembly resolution 70/1 of September 2015, entitled "Transforming our world: the 2030 Agenda for Sustainable Development", and its Sustainable Development Goal 12 on sustainable consumption and production,*

Clear Mandate from the UN Environment Assembly (UNEA2)

- Resolution 2/8, article 2 Encourages all member States (...) to move towards sustainable consumption and production patterns (...) and to collaborate to:
- (a) **Promote life cycle approaches**, including resource efficiency and sustainable use and management of resources (...)
 - (b) Facilitate actions including by exchange of experiences and **capacity-building on the life-cycle approach**, (...),
 - (c) Promote the **integration of sustainability into each stage of the life cycle** of goods and services,
 - (d) Improve the **availability of information** that enables consumers, investors, companies and Governments to make informed decisions
 - (e) Invite companies to (...) continue enhancing the **reporting of sustainability information** (...)
 - (g) Design and implement **national sustainable consumption and production policies** (...); ...



Why the Life Cycle Initiative?

**Growing need for
Life Cycle
Knowledge: tools,
data and indicators.**



Real need for **interface
between *users* and
experts of life cycle
approaches.**



What is the Life Cycle Initiative?



A public-private, **multi-stakeholder partnership** aiming to mainstream Life Cycle approaches



Enables the global use of credible **Life Cycle knowledge** by public and private decision makers

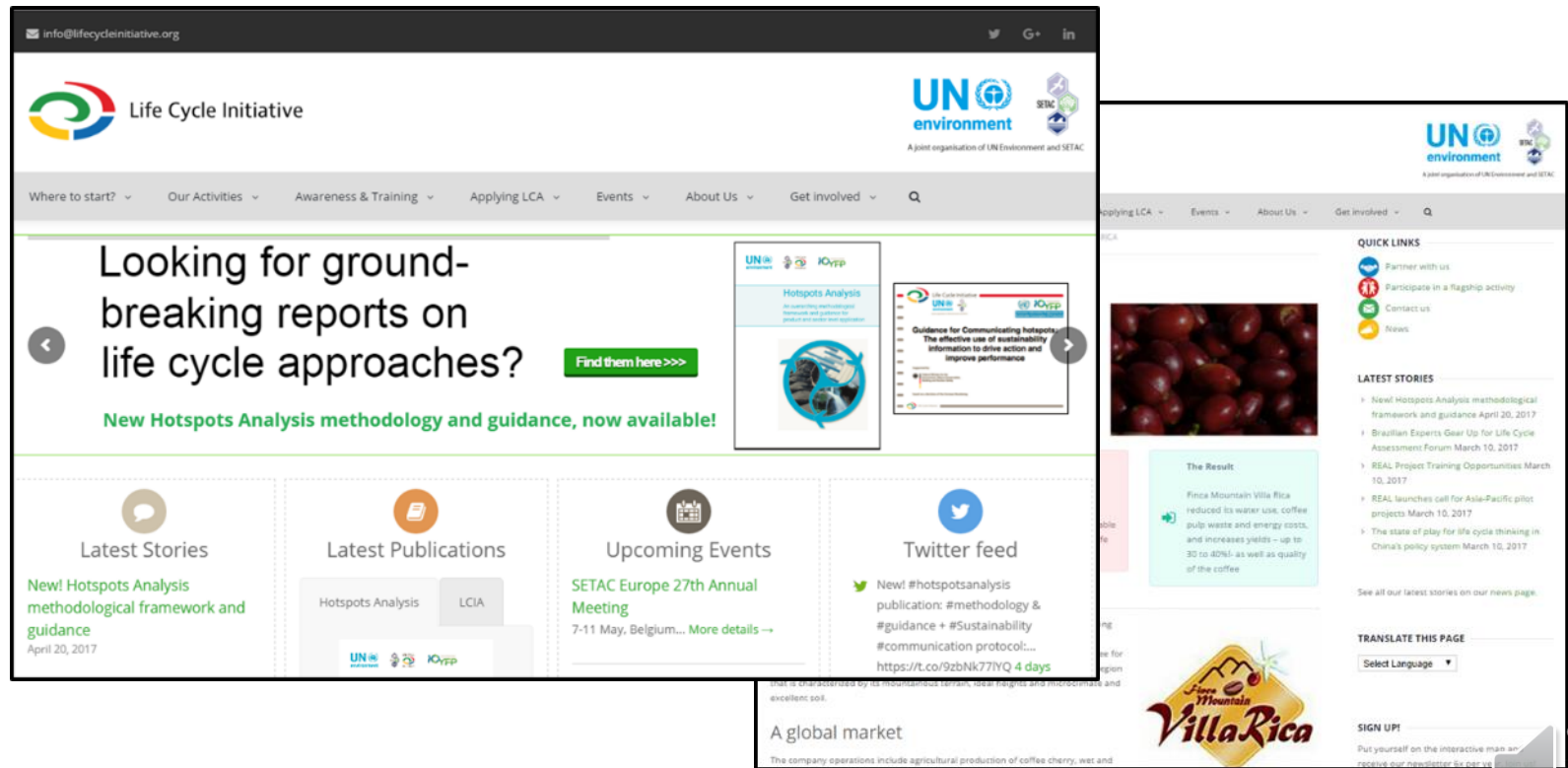


Provides an expert-user forum to **build consensus and access** to Life Cycle knowledge

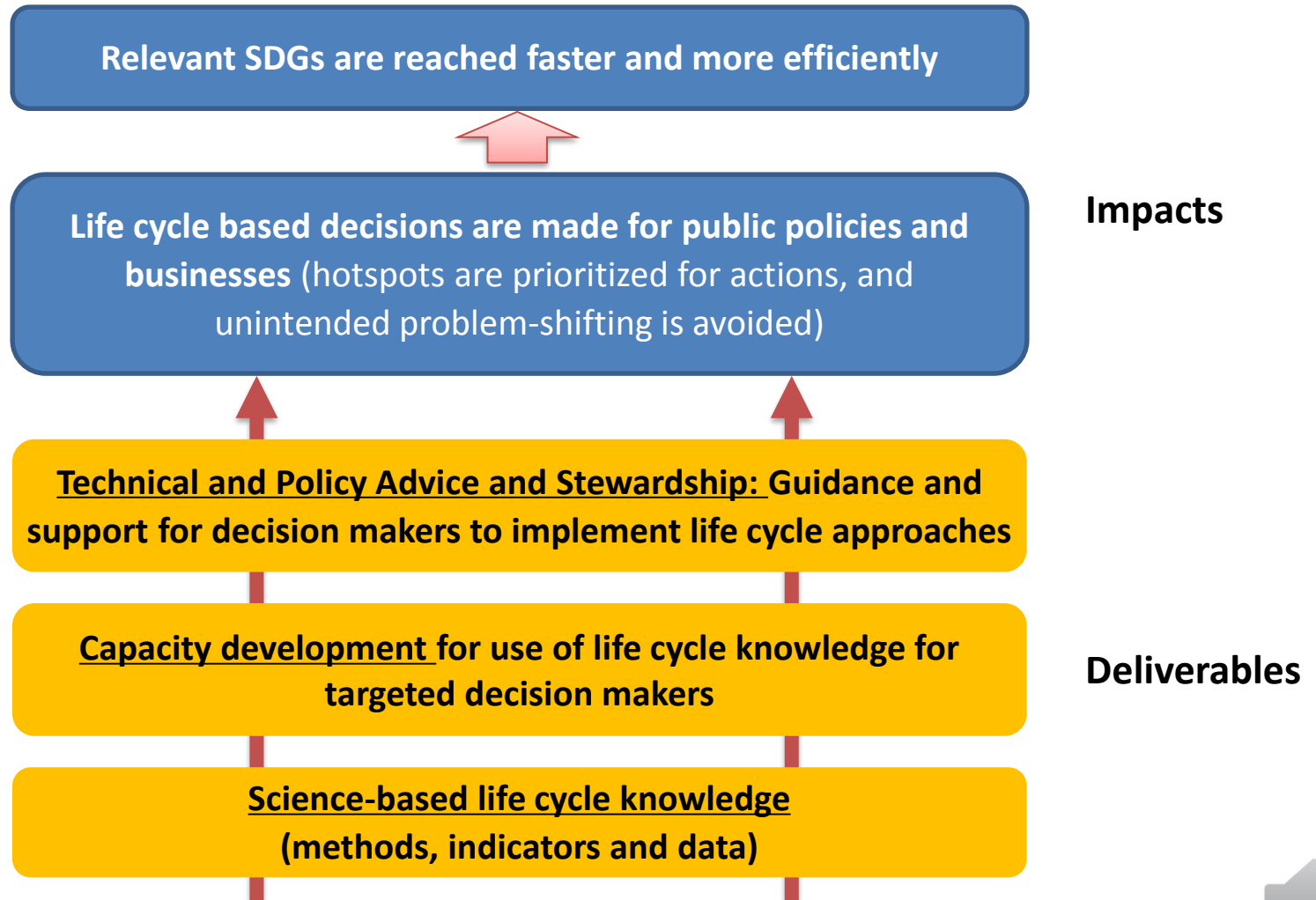


What is the Life Cycle Initiative?

Global reach. 4,000+ newsletter subscribers.
Website provides latest resources, tools, stories
www.lifecycleinitiative.org



Life Cycle Initiative: Theory of Change



Key work areas and deliverables



Knowledge



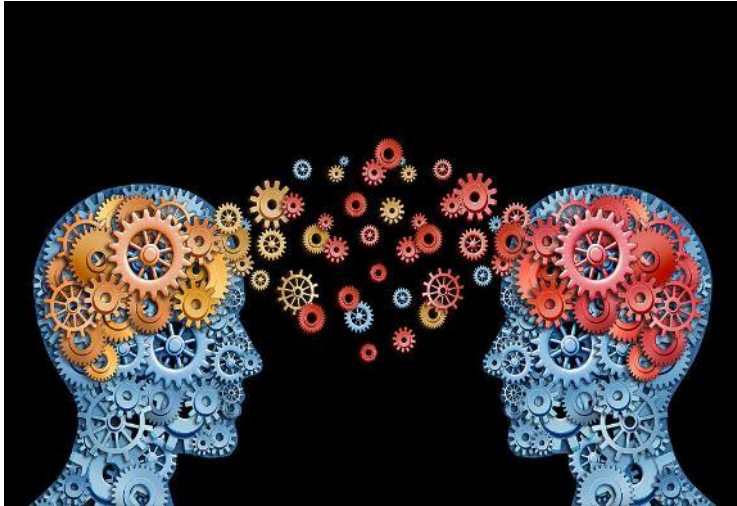
Capacity



Technical and policy advice



Work areas | Knowledge



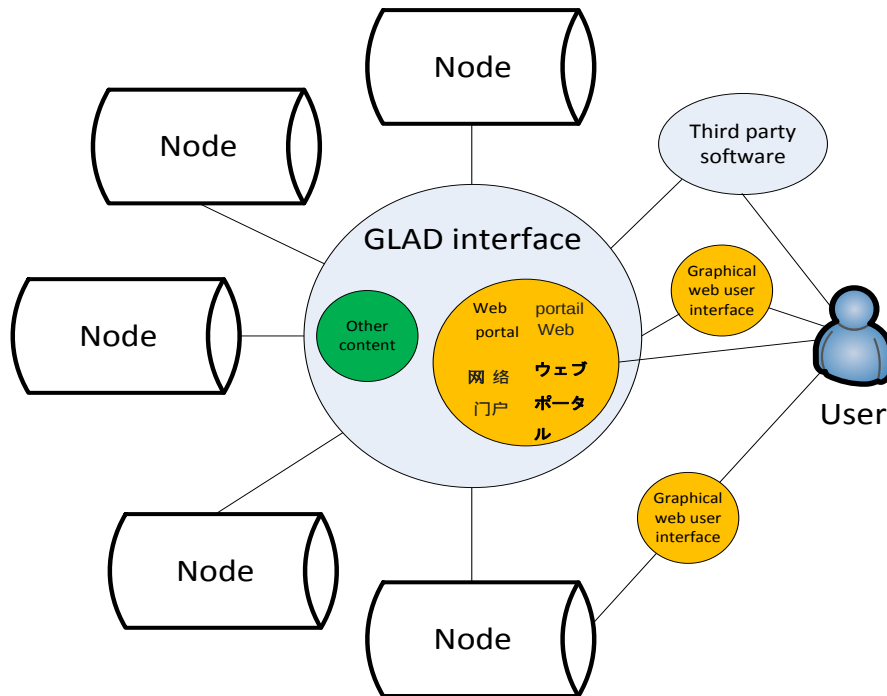
Knowledge sharing platform with life cycle data and indicators, all linked through a global nomenclature system

LCA databases and libraries of impact characterization factors
– environmental, social and economic impact assessment



Towards the Global LCA Data Access (GLAD) Network

Potential future structure of GLAD



Central, multi-lingual, user interface, enabling access to nodes worldwide, ensuring interoperability through agreed nomenclature and metadata descriptors (open stakeholder consultation until 15th May 2017: Kristina.Bowers@unep.org)



IT Platform development currently on-going with **international effort** (USA; Brazil; EC; China; Japan) coordinated by UN Environment



Work areas | Capacity development

Multiple Life Cycle Initiative products for policy makers, business decision makers and life cycle practitioners.



e-Learning



workshops



pilot projects

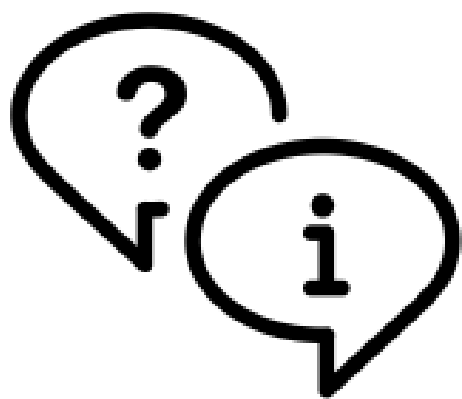


success stories and best practice (on-line + on-paper)



Work areas | Technical and policy advice

Community of Practice to mainstream Life Cycle Thinking into decision making and policy making



Forum for life cycle user groups



Repository of best practice



Global guidance, tools, position papers by experts



Work areas | Technical and policy advice

Global agenda

Impact assessment across boundary, value chains, life cycle stages for pollution control and decoupling

- can contribute to achieving Paris Agreement, SDG 8 and 12.

National level

Hotspot analysis for priority setting

- can be applied in 10YFP National Action Plans, SWITCH Programmes, Partnership for Action on Green Economy, and national environmental planning for priority setting.

Sector level

Value chain mapping and hotspots

- can be applied in 10YFP Sustainable Food Systems, Strategic Approach to International Chemicals Management (SAICM), eco-innovation project, Global Network for Resource Efficient and Cleaner Production (RECPnet) or The Sustainability Consortium
- apply in sectors such as tourism, chemicals, textiles, food, plastics, mining etc.



Work areas | Technical and policy advice

Company level

Better design, process and technology upgrade, action across value chain and innovative business model

Procurement

Methods on Life Cycle Costing to monetarize envi. cost

- Support efficient decision-making by procurers in public (and private) institutions through the 10YFP Sustainable Public Procurement Programme.

Social LCA

Methods on measuring social impact

- can be applied in Sustainability Reporting of companies and 10YFP Consumer Information programme

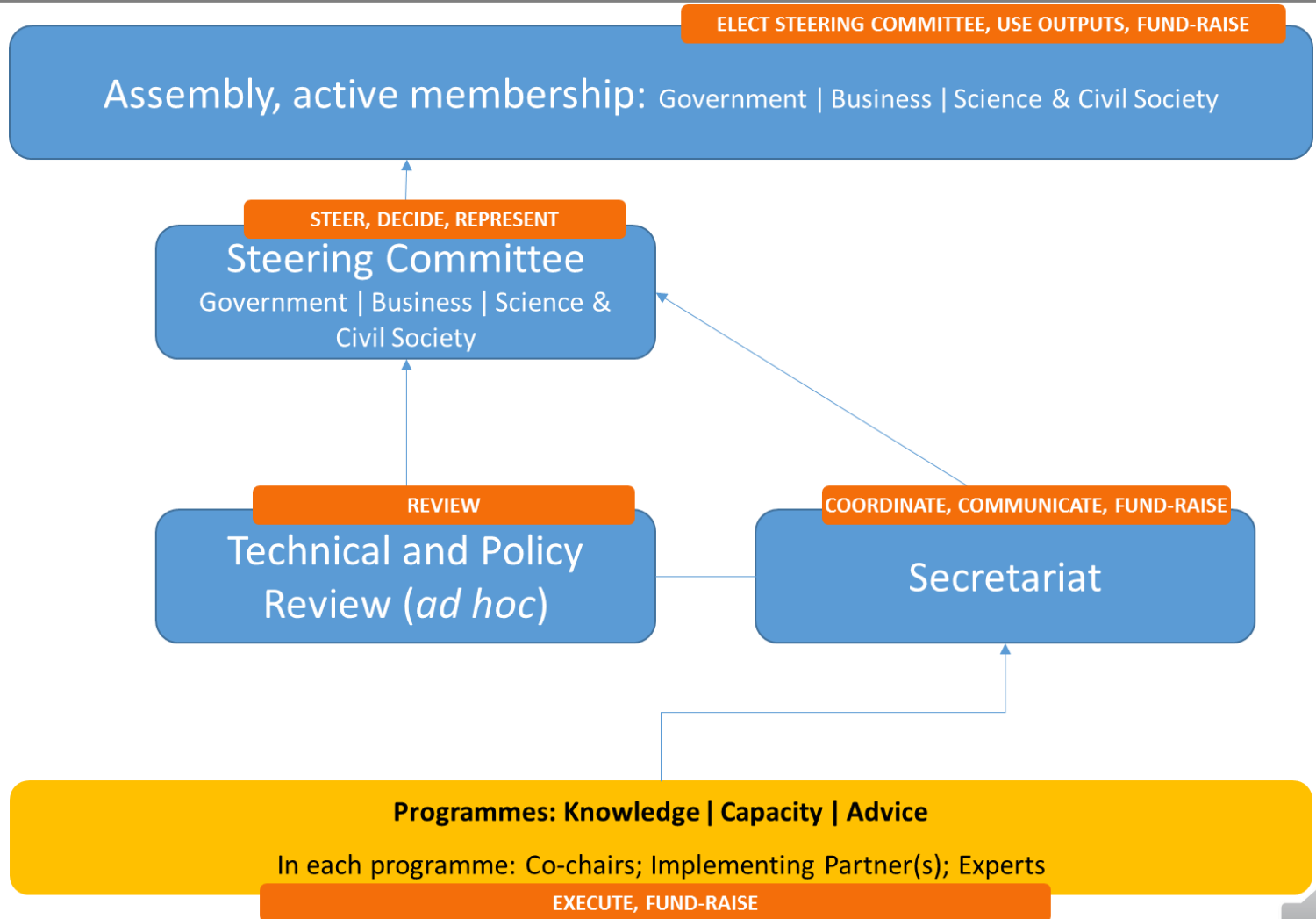
Certification

Life-cycle based evidence for performance monitoring

- can be applied in certification schemes such as Forest Stewardship Council, UTZ Certification and Better Cotton Initiative (to name a few), with potential links to trade mechanisms.



Structure & Governance



Why join the Life Cycle Initiative?

Growth and impact: Between 2002 and 2017, the Life Cycle Initiative contributed to the **global growth of national LCA networks - from 11 to 49 networks!**



Why join the Life Cycle Initiative?

Success stories: the Life Cycle Initiative promotes multiple success stories of life cycle approaches by SMEs in emerging economies.



INDIA GLYCOLS LIMITED



Life Cycle Initiative



Benefits of Membership

- **Vote** for representatives to the Steering Committee
- **Early access to the deliverables** of the Initiative
- **Participate** in regional and global **life cycle community**, transforming the economy through life cycle thinking
- **Influence** life cycle thinking in policy and decision making
- **Apply science** via expert Community of Practice
- Users needing to identify best approaches for specific policy- and decision-making processes gain **access to top experts** in the global life cycle community



Contact us, stay informed!



www.lifecycleinitiative.org



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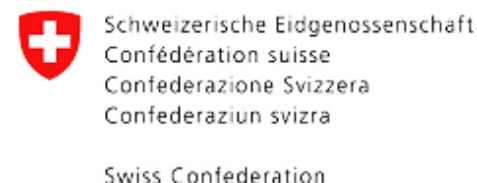


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