

Submission to the High-Level Climate Champions

Launch of the 2025 Work Programme Reflections on Progress and Call for Inputs

SUMMARY

At a Glance: Priorities for GCAA (2025-2030):

- Success: Mature zero-emission fuel supply chains, replicated finance models, systemic
 demonstrations, and embedded safety tracked by fuel volumes, finance model reuse,
 certified workforce, and HS&R integration.
- **Engagement**: Implementation Labs, finance—policy sprints, COP "deal windows," and regulator—operator dialogues to align policy, investment, and safety.
- **Equity:** Local value creation, shared cost-gap tools, Regional Climate Weeks as accelerators, and portable safety credentials to empower underrepresented groups.
- **Transparency:** GCAP status ladder, lifecycle and equity data, HS&R reporting as a success gate, and post-COP progress updates

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Date: August 2025

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1. What should success look like for the GCAA in the next five years, and how can it be measured effectively?

Fuel Adoption (FA) insights:

2030.

- **Fuel supply chain maturity**: Success means measurable progress in establishing *end-to-end zero-emission fuel supply chains* from production through transport to bunkering ports with secure offtake agreements across multiple sectors. *Metric*: Volume of zero-emission fuel contracted (by sector, geography) and reaching financial close by
- **Application of financial frameworks**: Instead of assuming "replication," success is the *reuse of proven financial templates* (e.g. cost-gap instruments, joint procurement models, time-stacked offtake contracts) in new geographies or sectors.
 - *Metric*: Number of distinct initiatives using a standardised finance or offtake framework first developed elsewhere.
- Systemic influence milestones: Recognising that "success" can look different:
 - o In some cases, a first-of-its-kind demonstration (e.g. first ammonia vessel call at a remote port).
 - In others, no ships yet deployed, but long-term fuel supply and infrastructure investment secured
 in a key bunkering hub.
 - Both outcomes drive systemic change and should be tracked accordingly.
 - *Metric*: Demonstration projects completed vs. long-term investment commitments secured both treated as valid progress pathways.

Human Safety & Risk (HS&R) insights:

- Safety as a non-negotiable success gate: Every fuel supply chain project should have HS&R built in safety case, risk modelling, and human factors integration.
 Metric: % of fuel supply projects at finance close with a published safety case and human competency framework.
- Workforce readiness as an indicator of systemic maturity: Success should be measured not only in tonnes of fuel moved, but in numbers of workers trained and certified to handle those fuels safely. *Metric*: Number of certified personnel for zero-emission fuel handling in ports and supply chains by region.
- **Safety-driven investment readiness**: Where projects demonstrate robust HS&R integration, investors are more willing to close deals.
 - Metric: % of projects citing HS&R readiness as a factor in securing finance close.

2. How can the GCAA facilitate direct and impactful engagement between Parties and NPS to support implementation?

Fuel Adoption (FA) insights:

• **Fuel hub Implementation Labs**: Establish Party–NPS Implementation Labs dedicated to developing *national and regional fuel hubs*, where energy ministries, ports, and investors co-design aligned strategies that link directly to NDC/NAP implementation.



- **Finance–policy design sprints**: Facilitate structured design sprints to co-develop *contractual and financial templates* that align policy support with private investment (e.g. time-stacked offtake, blended finance). These frameworks can then be exported across regions.
- **COP investment windows**: Create dedicated "deal windows" during COP thematic days where Parties and NPS can jointly advance pre-agreed projects to finance close not just showcase them.

Human Safety & Risk (HS&R) insights:

- Safety-integrated project pipelines: GCAA can require that projects seeking COP profile or GCAP registration include an HS&R plan (risk assessment, workforce training, emergency procedures). This raises the quality of projects presented to Parties.
- **Party–regulator–operator roundtables**: Host regular dialogue series where national regulators meet industry operators to align safety requirements with sectoral transitions. In maritime, this has unlocked confidence in scaling fuel adoption.
- Safety as an enabling condition: GCAA could signal that projects demonstrating robust HS&R are
 prioritised for support in Implementation Labs giving Parties confidence that human risks are
 mitigated before scaling.

3. How can the GCAA promote inclusive and equitable engagement, particularly from underrepresented groups and regions?

Fuel Adoption (FA) insights:

- Local value creation in fuel supply chains: Ensure that projects in emerging economies include *local* participation in fuel production and trade, not just transit. This builds ownership and long-term sustainability.
- Shared cost-gap mechanisms: Deploy international cost-bridging instruments so that smaller markets can access zero-emission fuels at the same effective cost as major hubs, avoiding inequitable distribution of the "green premium."
- Regional Climate Weeks as accelerators: Position RCWs as corridor and hub packaging clinics where
 underrepresented regions receive technical and financial support to align their projects with NDC/NAP
 delivery.

Human Safety & Risk (HS&R) insights:

- Safety and competency as a fairness issue: If new fuel systems are deployed without adequate local training, risks are disproportionately borne by frontline workers in underrepresented regions. Embedding HS&R training in climate finance packages addresses this inequity.
- **Portable safety credentials**: Develop internationally recognised zero-emission fuel safety certifications, enabling workers from the Global South to access jobs in global supply chains.
- Inclusive co-design: GCAA could require that any global initiative seeking support demonstrate co-design
 with underrepresented groups, including integrating their perspectives on safe and fair working
 conditions.
- **Human factors as a lens on equity**: Recognise that systemic risks (fatigue, inadequate ergonomics, unsafe port operations) are often most acute where regulation is weakest making HS&R integration a direct equity intervention.



4. What improvements can be made to ensure better transparency, reporting, and follow-up of the GCAA?

Fuel Adoption (FA) insights:

- Implementation status ladder in GCAP: Track projects through a clear sequence announcement →
 design → finance close → build → operate → systemic influence with evidence required at each
 stage.
- **Lifecycle data integration**: Add well-to-wake carbon accounting and cross-sector offtake data fields to GCAP, enabling Parties to understand the real systemic contribution of a project.
- **Replication of frameworks, not projects**: GCAP entries should track which contractual, financial, or governance frameworks are being reused across initiatives, as a proxy for systemic learning.
- **Post-COP follow-up cycles**: Require all initiatives showcased at COP to update progress at 6 and 12 months, ensuring follow-through.

Human Safety & Risk (HS&R) insights:

- **HS&R fields in GCAP**: Add required reporting on safety readiness (e.g. QRA completed, competencies in place) and workforce training progress.
- Safety gates in progress classification: For a project to be recognised as "finance closed" or "operational," evidence of HS&R integration should be mandatory.
- **Transparency on equity impacts**: GCAP could disaggregate reporting on who benefits tracking where safety training, jobs, and protections are deployed by geography, gender, and income group.
- **Granary of solutions with HS&R modules**: Every mature initiative should contribute HS&R guidance (training templates, safety protocols) into the granary, making human-centred safety transferrable across sectors.



Notes:

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The Lloyd's Register Maritime Decarbonisation Hub (commonly known as The Decarb Hub) is an independent, non-profit initiative established through a partnership between Lloyd's Register Foundation — a global charity with a mission to engineer a safer world — and Lloyd's Register Group, a global provider of maritime professional services with over 260 years of heritage. This partnership brings together the Foundation's public benefit mandate and focus on societal resilience, with the Group's deep technical expertise and trusted relationships across the maritime industry. Positioned at the intersection of these two organisations, the Hub is uniquely equipped to accelerate the safe, sustainable, and human-centric decarbonisation of global shipping — combining neutrality with influence, and research with real-world application. For more information, go to www.thedecarbhub.org

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