IAEG WG11 Aerospace ESG Engagement Webinar

The ‘Why’ of ESG and The Importance of Stakeholder Engagement

OCTOBER 12, 2022
## AGENDA

<table>
<thead>
<tr>
<th>Session</th>
<th>Speakers/travelers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome &amp; Compliance Reminders</td>
<td>Ashley Rubinsky/Jim Wilson</td>
</tr>
<tr>
<td>IAEG Overview</td>
<td>Ashley Rubinsky</td>
</tr>
</tbody>
</table>
| Panel Discussion                 | Nicolas Chrétien, Airbus Head of Sustainability & Environment  
                                   | Geraldine Barnuevo, Head of Sustainability GE Aviation and IAEG Board of Directors 
                                   | David Graeber, Boeing Supply Chain Sustainability Sr. Manager, IAEG Board of Directors; WG11 Co-Sponsor 
                                   | Ashley Rubinsky, Lockheed Martin Sr. Project Manager, Supply Chain Operations & Sustainability 
                                   | Christian Böhler, Roland Berger GmbH Partner          |
| WG11 Overview                   | Mark Walker and Phil Godfrey                          |
| Closing Remarks                  |                                                        |
PANEL DISCUSSION

Nicholas Chrétien
Head of Sustainability & Environment

Geraldine Barnuevo
Head of Sustainability
GE Aviation

David Graeber
Boeing Supply Chain Sustainability Sr. Manager

Christian Boehler
Partner at Roland Berger
PANEL QUESTIONS

How do you view ESG and why is it important for an organization/our industry?

Nicholas Chrétien
Head of Sustainability & Environment

Geraldine Barnuevo
Head of Sustainability
GE Aviation

David Graeber
Boeing Supply Chain
Sustainability Sr. Manager
PANEL QUESTIONS

How do you see ESG changing the landscape of Operations?

Christian Boehler
Partner at Roland Berger
IAEG WG11 – Sustainability Supply Chain Webinar

October 12, 2022
Customers, regulators, investors – basically every stakeholder group – has put significant sustainability expectations on the top of their agenda.

**Companies’ emission targets**
Transferring promises made to stakeholders into reality, e.g., through securing advanced recycling capacities for the upcoming years or fully switch to green energy consumption in operations.

**Regulatory compliance**
Fulfilling legal requirements and pro-actively anticipating upcoming regulations, e.g., by start implementing a digital material pass.

**Risk mitigation**
Fulfilling stakeholder expectations and minimizing reputational and legal risks, e.g., through assessments by third parties.

**Limited availability of resources**
Preserving the environment, developing the society and being a responsible corporate citizen, e.g., through implementing refurbishment business models.

**Shift in consumer behavior**
Fulfilling consumer expectations caused by shift in consumer behaviour and willingness to pay a price premium, e.g., by creating full carbon footprint transparency on products.

**Shareholder pressure**
Fulfilling rising pressure and demand from investors for sustainably labelled funds reaching USD ~35 trillion in 2020, e.g., by significantly reducing the carbon footprint to net zero.
For operations, this requires the inclusion of sustainability into the classical QCD approach (Quality-Cost-Delivery) – The triangle becomes a square: QCDS

Inclusion of Sustainability in the QCD approach

Old world: QCD

A new thinking gains ground

The 'magic square' of operations

QCDS

Sustainability
Operations decision makers have the power to truly impact sustainability in all ESG dimensions – Functional leads all along the value chain need to set priorities

Contribution of operations to sustainability (selected examples)

- **Innovation**
  - Customer expectations on GHG/ESG
  - Early transparency on products' emissions and Design-to-\( \text{CO}_2 \)
  - Re prioritization of innovation and product portfolio
  - Emissions-free R&D process (prototypes, testing, facilities)

- **Product development**
  - ESG-compliance across suppliers (all tiers upstream)
  - New criteria & data for supplier selection and management
  - Bringing in innovations from supply base

- **Procurement**
  - GHG-optimized global production network
  - Low-energy, waste-reduced & ESG-compliant factories

- **Production**
  - Advanced supply chain risk management
  - Emission-free warehousing & transportations

- **Supply chain & logistics**
  - Reducing emissions through "x-as-a-service"
  - Keeping responsibility at product use and end-of-life/second life

- **Service & after sales**
  - Integrating ESG in S&OP

**Challenges for all functions**

- Transferring corporate ESG targets to functional goals
- New competences, levers, and methods to realize sustainability
- Price for \( \text{CO}_2 \) as decision criterion in investment/business cases
- Role of quality function to ensure sustainability

**Criteria highlighted in solid colors:** Main impact areas of operations on sustainability
From the various sustainability challenges three stand out for operations and the supply chain: Decarbonization, circular economy, and human rights.

**Decarbonization**
- Scope 3 upstream
- Scope 1
- Scope 2
- Scope 3 downstream
- Total emissions profile
- End-to-end decarbonization, from raw materials to end-of-life (suppliers and own operations) – meeting the Paris Agreement

**Circular economy**
- Only 8.6% of the resources entering the global economy are currently circular...
- Resources: Extracted, total 92.0 Gt
- Societal needs: Take, Process, Produce, Provide
- Recycled resources 8.6 Gt
- Bringing higher shares of recycled and renewable materials into products is key as customers and regulators demand for it

**Human rights**
- Regulations to ensure human rights along the supply chain gain ground, enforcing companies to take responsibilities for their suppliers

---

**EUROPEAN SUPPLY CHAIN ACT**
- What will fit and be required to do?
- Which areas will be protected?
- How will the law be enforced?
- What will be part of the European Supply Chain Act?
PANEL QUESTIONS

How have you seen other industries tackle ESG engagement?

Geraldine Barnuevo
Head of Sustainability
GE Aviation
PANEL QUESTIONS

What are the different stakeholder groups and why is engagement with them important on the topic of ESG?

Nicholas Chrétien  
Head of Sustainability & Environment

David Graeber  
Boeing Supply Chain  
Sustainability Sr. Manager
PANEL QUESTIONS

What are the different types of stakeholders’ engagements and how can the different parties better collaborate together?

David Graeber  
Boeing Supply Chain  
Sustainability Sr. Manager

Christian Boehler  
Partner at Roland Berger
PANEL QUESTIONS

What are examples of how IAEG could demonstrate supply chain ESG stewardship?

Ashley Rubinsky
Lockheed Martin Sr. Project Mgr., Operations & Sustainability
AEROSPACE ESG STEWARDSHIP

**Foster Awareness**
- IAEG WG11 Introduction to Supply Chain & Key Functional Partners
- Leverage Best Practices from IAEG’s 10 years of Environmental Focus

**2023 Launch**
- Prepare to ‘TAKE OFF’

---

**Build Obligation Awareness**
- Nov. 16 Webinar – Register
- Due Diligence Alerts & Post-Event Resources

**Enhance with On-Going Feedback**
IAEG WG11 Aerospace Industry ESG Engagement

Goal: To deploy and maintain an enduring aerospace industry voluntary standard, with the support of a proven third-party solution, for assessing Environment, Social and Governance (ESG) practices that enables informed business decisions, duty of care compliance obligations, sustainability reporting, and positive change in environmental & social topics.

Motivation:
- Efficient approach to industry ESG assessment
- Value chain ESG due diligence compliance obligations
- Demonstrate SC ESG stewardship to stakeholders

Approach:
- Assess compliance requirements and ESG reporting objectives
  - Request & evaluate proposals
  - Procure 3rd Party solution

Success Measure:
Intention of industry to align on & fund a voluntary standard

Outputs:
3rd Party managed ESG assessment process & IT system
+ Supply base ESG communication
First Step: **Reusable Sustainability Assessments**!

**Motivation:**
- Efficient approach to industry ESG assessment
- Value chain ESG due diligence compliance obligations
- Demonstrate SC ESG stewardship to stakeholders

**Approach:**
- Assess compliance requirements and ESG reporting objectives
  - Request & evaluate proposals
  - Procure 3rd Party solution

**Success Measure:**
Intention of industry to align on & fund a voluntary standard

**Outputs:**
- 3rd Party managed ESG assessment process & IT system
  - Supply base ESG communication

---

© 2022 IAEG®
2022 Goal: Implement a voluntary standard and program for assessing, managing and reporting Environmental, Social & Governance (ESG) risk in aerospace supply chains by sourcing an existing 3rd party solution for unilateral consideration and use of IAEG members / Aerospace & Defense companies.
"A sustainable supply chain driven by ESG engagements is an exceptional opportunity for value creation and earning the trust of all our stakeholders."
Roque Carmona, Chief Procurement Officer, Thales

"Great potential to accelerate ESG maturity in the aerospace sector."
LeAnn Ridgeway, VP Sustainability, Collins Aerospace

"Achieving sustainable aviation is far from impossible. Today, employees at Pratt & Whitney are solving the challenges and creating the technologies that will introduce a new era of sustainable aviation."
Graham Webb, Chief Sustainability Officer, Pratt & Whitney

This important programme has the potential to unlock a lot of value and help deliver good ESG stewardship across the sector.
Benn Godfrey, VP Procurement, Rolls Royce

"Thales ESG ambitions are to embed ambitious sustainability commitments in all processes and to maximize the sustainability impact of our portfolio of solutions. Both find a perfect application for Aeronautics."
Sophie Le Pennec, VP HSE, Thales

"Sustainability inspires us as corporate citizens and signals our values in all we do to keep the Aerospace supply chain a strong foundation for continued growth and success. The focus of IAEG WG11 will expand upon our strong track record of developing relationships and practices that ensure a more sustainable supply chain."
Chris Stone, Supply Chain Vice President, Lockheed Martin Corporation

"Boeing is committed to advancing global sustainability, and IAEG’s efforts will be a cornerstone of our responsible supply chain practices. An industry voluntary approach is key for efficiency and demonstrating ESG maturity to customers, investors and regulators."
William Ampofo, Chair, Boeing Supply Chain Operations Council, and Vice President, Parts & Distribution Services and Supply Chain, Boeing Global Services.

"At Airbus, we pioneer sustainable aerospace for a safe and united world. We are taking the lead in driving a holistic approach towards building a more sustainable ecosystem for our industry, which entails looking at our end to end value chain environmental and social footprint. With a global footprint and a global supply chain, we welcome efforts from IAEG to build a harmonized and standardized approach towards ESG in the industry, which fully supports our sustainability ambition."
Nicolas Chretien, HO Sustainability & Environment at Airbus
FOLLOW-UP QUESTIONS

Questions@iaeg.com