

Metals Academy 4 - 2025 Programme



Grande Abbaye de La Ramée – Jodoigne, Belgium

Monday 5 May (PM) to Thursday 8 May 2025

| Monday 5 May - Day 1 | |
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| <i>Chair: Violaine Verougstraete</i> | |
| Arrival for newcomers (only) | 12:00 - 13:00 |
| Lunch for newcomers (only) | 13:00 - 14:00 |
| Introduction to metals | |
| Module 1.1.: Why we use metals, why they are essential for society? | 14:00 - 15:00 |
| Basic historical background, showing the importance of metals and their uses throughout the ages. Why do we want and need to use metals today? General overview of terminology, definitions, and specific characteristics of metals and alloys, highlighting connections between metals, essential uses and key features for modern society (circularity, durability and technical function) | <i>Staf Laget</i> Organising Committee |
| Coffee/Tea Break | 15:00 - 15:30 |
| Module 1.2.: Metals processes & Applications | 15:30 - 16:30 |
| A general overview of main production, refining & recycling processes | <i>Joris Kenis</i> Aurubis |
| Module 1.3.: Are we entering a new 'Metals Age'? | 16:30 - 17:00 |
| The last few years have seen metals brought firmly into focus as the Critical and Strategic enablers for the green and digital transitions. Can we balance this exciting new era of positivity while maintaining sustainable and responsible management goals? An overview | <i>Howard Winbow</i> International Zinc Association |
| Arrival for other participants | From 17:00 |
| Introductory apéritif followed by dinner & evening activities | From 19:00 |

Tuesday 6 May - Day 2

Chairs: Mark Mistry & Howard Winbow

ESGs partners of Sustainability?

Sustainable development is development that meets the needs of the present without comprising the ability of future generations to meet their own needs (Brundtland, 1987)

Corporate sustainability is an approach to conducting business that creates sustainable, long-term shareholder, employee, consumer, and societal value by pursuing responsible environmental, social and economic strategies. Can these strategies be reconciled?

The day will bring together different stakeholders providing their perspectives and expectations on a sustainable metals industry.

Module 2.1: Scene setting - Sustainability in a complex world

09:00 - 10:00

TDi's vision and perspectives on how they see sustainability at large

Assheton S. Carter
TDi Sustainability

Module 2.2: Raw materials/resources challenges

10:00 - 11:00

From NIMBY (Not In My Back Yard), BANANA (Build Absolutely Nothing Anywhere Near Anything) to BIMBY (Better In My Back Yard): the challenge, in practice

Peter Tom Jones
KU Leuven

Coffee/Tea Break

11:00 – 11:30

Module 2.3-Part A: ESG challenges – customers' expectations

11:30 - 12:30

What do customers expect? Are Downstream industries interested and why?
Which metals are in scope and what are their concerns.
ESG and the metals/minerals industry and what are downstream industries doing in view of ESG?

Mark Mistry
Nickel Institute

Lunch

12:30 – 14:00

Module 2.3-Part B: ESG challenges – employees' expectations

14:00 - 15:00

What do employees expect?
Trade Union perspective

Judith Kirton Darling
IndustriAll

Module 2.4: What can industry's response be?

15:00 - 15:30

Wrap up of the learnings: How to organise corporate sustainability considering e.g. UN Sustainable Development Goals and ESG? Impacts, challenges & benefits.

Mark Mistry
Nickel Institute

Coffee/Tea Break

15:30 - 16:00

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| Module 2.4- Part A: Nyrstar's Journey | 16:00 - 17:00 |
| Introduction & context of ESGs and Nyrstar's approach. The challenges of an energy-intensive business. | <i>Inge Maes</i> Nyrstar |
| Module 2.4- Part B: Safer use and its relevance in ESG | 17:00 - 18:00 |
| The context of safer use bringing together different sustainability attributes | <i>Hugo Waeterschoot</i> Volunteer |
| Evening activity | |
| Apéritif followed by dinner | 19:30 |

| Wednesday 7 May - Day 3 | |
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| <i>Chairs: Staf Laget & Frank Van Assche</i> | |
| Decarbonisation/Defossilisation | |
| Decarbonisation or Defossilisation of the processes? What is the strategy? Description of the global and EU energy transition outlook and forecasts for the future energy mix, impact on the demand and uses of metals. The day will also include case studies. | |
| Module 3.1: Introduction | 09:00 – 10:00 |
| History of a journey | <i>Staf Laget</i> Organising Committee |
| Module 3.2: Industry perspective | 10:00 – 11:00 |
| ETS/CBAM/Hydrogen | <i>Federico Benito Donà</i> Eurofer |
| Coffee/Tea Break | 11:00 – 11:30 |
| Module 3.3: Company example – the search for zero carbon production | 11:30 – 12:30 |
| Meca-clay a breakthrough technology to produce activated clay, a cementitious substitute, fully electrically | <i>Luc Rudowski</i> Thyssen Krupp |
| Lunch | 12:30 – 14:00 |
| Module 3.4: Roadmaps | 14:00 – 15:00 |
| “Roadmap to decarbonisation/defossilisation”: the copper example | <i>Anna-Maria Karjalainen</i> International Copper Association |
| Coffee/Tea Break | 15:00 – 15:30 |
| Module 3.5: Further challenges | 15:30 – 16:30 |
| Zero carbon emission heat-technology and opportunities for the (non-) ferro industry | <i>Hannes Laget</i> Brabetech & Katchai |
| Module 3.6: Global Critical Minerals Outlook | 16:30 – 17:00 |
| International perspective on key trends in the energy and critical minerals sector, examining demand drivers and the evolving landscape of supply and investment. | <i>Alexandra Hegarty</i> International Energy Agency |
| Certificates & apéritif followed by dinner & evening activities | 19:30 |

Thursday 8 May - Day 4

Interactive modules “2 à la carte”

This final day will start at 08:45 - (2 hours per module)

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| Morning Coffee/Tea Break | 10:45 – 11:00 |
| Module A: Market Applications | |
| Metals in SDGs: Accommodation, food safety, health aspects | <i>Mukund Bhagwat</i> Eurometaux |
| Module B: Lifecycle Assessment (2 parts) | |
| Module B1: Intro to LCA (more newcomers oriented) | |
| The basics of LCA: what is it, how can it be used and communicated and what are important influencing factors? LCA in the regulatory context and in the voluntary context | <i>Benedetta Nucci</i> European Aluminium |
| Module B2: LCA Specific: case study | |
| Weighing the impact categories: the weighing factors as defined by the Metals Academy participants | <i>Staf Laget</i> Organising Committee |
| The battery case: from PEF to the European Delegated Act on carbon footprint for batteries used in EVs | <i>Claude Chanson</i> Consultant |
| Module C: “Transcending boundaries through storytelling” | |
| Storytelling continued: How (multi) culture, history, and risk perception play in outreach and negotiations? | <i>Heinrich Pecina</i> WKO (Wirtschaftskammer Österreich) <i>Frank Van Assche</i> Organising Committee |
| Lunch | 13:00 – 14:00 |
| Group Exercise: Business - Regulatory Case for the whole group | |
| Your aim as a team is to produce a high-level summary of the key aspects to include in a business case to develop increased volume of metals for your facility. Assisted by all the learnings from the week, discuss the main issues to address and regulatory compliance needed, for a project in: <ul style="list-style-type: none"> • Mining • Smelting • Recycling | <i>Howard Winbow</i> International Zinc Association |
| Closure of the Academy | 16:00 |