



ADVANCED MASTERCLASS

# SUSTAINABLE TRANSITION STRATEGIES

A scientific,  
engineering  
and business  
perspective

For the Chemical and  
Life Sciences Industry

27 - 31 May 2024 in Brussels



IN COLLABORATION WITH



BNP PARIBAS  
FORTIS

ALLEN & OVERY



## ADVANCED MASTERCLASS

**A scientific, engineering  
and business perspective**

# SUSTAINABLE TRANSITION STRATEGIES

**for the Chemical  
and Life Sciences Industry**

## CONTEXT

The chemical and life sciences industry is facing unprecedented challenges in terms of sustainability, with pressure to resolve these within a particularly tight timeframe. With this advanced masterclass on **Sustainable Transition Strategies**, essencia – the Belgian federation for the chemical and life sciences industry – offers an in-depth **5-day training course**, looking at sustainability from a scientific, engineering and business perspective.

The program is supported by **KU Leuven University, the University of Ghent** and **Allen & Overy**, and is hosted at **BNP Paribas Fortis** in Brussels.

## AIM

Globally, sustainability challenges need to be addressed. With sustainability being at the core of the strategy of the chemical and life sciences industry in Belgium and Europe, the chemical sector is a solution-provider despite a highly competitive economy.

Policy, technology, the implementation of legal frameworks and operational standards are changing very fast. Keeping track of

this evolution is the main goal of this 5-day masterclass, grounded in a scientific, engineering, legal and business point of view throughout the whole value chain.

## WHAT TO EXPECT

- Key notes by academics, policy makers and industry experts
- Thematic lectures on life-cycle assessment (LCA), sustainability reporting, carbon accounting, and more by specialists from the chemical industry, research centers and the financial sector
- Companies sharing experiences and insights on their endeavours on advancing sustainability and circular economy solutions

This Advanced Masterclass starts with a strategic state of play by Prof. Dr. ir. **Gerard Govers**, Vice Rector of KU Leuven and Responsible for Sustainability Policy.

Due to the international context of the subject matter, audience and speakers, this course will be held entirely in English.

### PRACTICAL INFORMATION



#### LOCATION

BNP Paribas Fortis  
Koningsstraat 20  
1000 Brussels

#### FOOD & BEVERAGES

Business menu, coffee  
breaks and closing cocktail  
included

#### TOTAL REGISTRATION FEE

€ 2500, excl. VAT

#### REGISTRATION

[www.essencia.be/agenda](http://www.essencia.be/agenda)

# PROGRAM

This advanced masterclass is co-developed with member companies, experts and academics and aims to increase sustainability knowledge and awareness within the chemical and life sciences industry.

## DAY 01

The first day starts with an overview on the **sustainability challenges** the world is facing, followed by **European legislation** and industry initiatives. In the afternoon, we provide approaches on **metrics, reporting and ratings**.

## DAY 02

The second day covers **taxonomy, tools and standards** that drive sustainability in our industry. In the morning, we look at how the banks have become **sustainable business drivers** and explore business tools for sustainable project selection and strategy. In the afternoon, this is followed by the methodology for **scope 3**. The day ends with Life Cycle Assessment as an important instrument, considering economic aspects.

## DAY 03

The third day focuses on **technology**. We start with an overview of the most important research initiatives by the University of Ghent. Before noon, we look at sustainability aspects from the **cracker furnaces** as well as from a **batch perspective**. And in the afternoon, we move to the important policy aspects on **circular chemical economy**, followed by real company implementations on chemical circularity.

## DAY 04

The fourth day looks at setting up **sustainable value chains** based on the quest for energy, performant legislation and tools. We start with the energy question in the value chain, followed by the legislation. In the afternoon, we address the methodology for carbon neutral **chemical building blocks**. The day ends with the **electronic product passport** for batteries from a content as well as a platform point of view.

## DAY 05

The fifth and final day looks at **long-term innovations and considerations** to achieve sustainability goals by 2050. From companies' accounts on their transformation journeys to the latest emerging trends on **energy and biodiversity**, research advances on **renewable products** and the considerations of **nuclear process innovations**, this day offers a platform to explore and discuss the myriad of pathways towards sustainable business in the long-term. The day is closed by identifying the **industrial needs** to realise the European Green Deal from a policy point of view.

# GOVERNANCE BOARD

The Governance Board determines the strategic goals of this Advanced Masterclass on Sustainability, and ensures that the course is optimally tailored to the current and future needs and requirements of the chemical and life sciences industry.

## GOVERNANCE BOARD AND STEERING COMMITTEE

### **Yves Verschueren**

Managing Director, essenscia

### **Ann Wurman**

Managing Director, essenscia vlaanderen

### **Frédéric Druck**

Managing Director, essenscia wallonie/brussels

### **Geert Boogaerts**

Director Safety & Sustainability, essenscia

### **Prof. Dr. Gerard Govers**

Vice-rector Science, Engineering and Technology and Vice-rector Sustainability, KU Leuven

### **Jan Remeysen**

CEO, BASF Antwerpen

### **Lieven Stalmans**

Group Manager Energy & Climate, Borealis

### **Inge Van der Meeren**

Antwerp & Meerhout Plant Manager, ExxonMobil

### **Anouk Van Looveren**

Country Manager, Dow Belgium

### **Dominique Debecker**

VP Partnerships & Memberships, Global Sustainability, Syensqo

### **Prof. Dr. ir. Kevin M. Van Geem**

Full professor in Thermochemical Reaction Engineering, Ghent University, and Director of the steam cracking pilot plant and Director of the board of LCT, and Director of Centre of Sustainable Chemistry (CSC)

## ABOUT ESSENSCIA

essenscia is the Belgian federation of the chemical industry and life sciences sector. The organisation defends the specific interests of more than 720 companies active in chemistry, plastics, pharma and biotech.

essenscia's role is to offer a tailor-made service, providing expertise and advice on sectoral issues. essenscia also represents the sector in the media and defends the interests of chemistry and life sciences at all levels.

# TARGET AUDIENCE

This advanced masterclass is made for professionals with experience in the chemical and life sciences industry for whom a global overview and in-depth understanding of sustainability issues is key. This course will help them to deepen their expertise on the most material aspects for the industry, illustrated with clear practical examples and company testimonials. A questioning attitude will help to increase the mutual understanding around common challenges and solutions. Peer exchange is crucial for fostering advance.

# DAILY SCHEDULE

07.30	Arrival coffee
08.00	Keynote
08.30	Presentations
10.15	Coffee break
10.30	Presentations
12.00	Lunch
13.00	Keynote
13.30	Presentations
15.15	Coffee break
15.30	Presentations
17.00	End

# DAY-TO-DAY PROGRAM OVERVIEW

## DAY 01

Monday 27 MAY | 08:00 – 17:00

**State of play: The foundation for your strategy**

### Keynote

**A global outlook of the chemical industry**

Dr. Moncef Hadhri, Chief Economist, Cefic

**State of play: an academic perspective**

**Important balancing**

Prof. Dr. Gerard Govers, Vice-rector Science, Engineering & Technology and Vice-rector Sustainability, KU Leuven

**State of play: an industrial point of view**

**Towards a sustainable industry**

Dr. ir. Ann Dierckx, Director Innovation and Circular Economy, essenscia

### Keynote

**European Policy: An administration point of view**

Matthias de Moor, General Representative of Flanders to the EU, Vlaamse Overheid

**An academic point of view on metrics and ratings**

**Towards a real standard**

Prof. Dr. Karel Van Acker, Professor Circular Economy, KU Leuven

**A consultancy point of view on reporting**

**A global strong tool?**

Reinout De Clercq, Partner Sustainability & Climate, Deloitte

## DAY 02

Tuesday 28 MAY | 08:00 – 17:00

**Tools and standards: A business driver on site?**

### Keynote

**Carbon footprint & accounting**

Barbara Veranneman  
Director International Affairs and Legal Counsel Energy & Climate, essenscia vlaanderen, Octrooicel

**A banker's view on sustainability**

**Sustainable finance and the impact on cost of capital**

Claire Iversenc, Head of Sustainable Business Transformation at BNP Group Company Engagement

### Taxonomy

**The base line**

Axel de Backer, Senior Associate, Allen & Overy

**Project impact and selection**  
**Increasing value for your business**

Bruno van Parys, Head of Sustainable Portfolio Management (SPM), Syensqo

### Sustainable value chains

**The real impact**

Dr. Alessandro Pistillo, Director Digital & Sustainability Strategic Projects, BASF & Co-Chair Work Stream GHG Scope 3 Emissions, TfS

### How to choose

**Life-cycle assessment: to be or not to be**

Dr. Miet van Dael, Researcher, VITO  
Bart de Bruycker, LCA and Sustainability Expert, Eastman

## DAY 03

Wednesday 29 MAY | 08:00 – 17:00

**Exploring the myriad of pathways to sustainability: Engineered examples**

### Keynote

**A research perspective on the chemical industry**

Prof. Dr. Ir. Kevin van Geem, Professor, Faculty of Engineering and Architecture, and Director of the Center for Sustainable Chemistry, Ghent University  
Mike Bonheure, Researcher, Ghent University

**Electrification of the chemical industry**

**The cracker of the future**

Dr. Marco Bosch, Head of Carbon Management Technologies, BASF

### Sustainability engineering

**Batch processes**

Geert Schelkens, R&D Manager Early Phase API, Ajinomoto

### Keynote

**Important policy aspects on circularity**

Saskia Walraedt, Director PolyMatters, essenscia

### Company experiences

**Circular Economy Solutions**

Geert van Ballaer, Strategic Platform Leader Circular Economy Solutions, Borealis

**Advanced chemical recycling of plastics**

Xavier Milcent, EU / AP Advanced Recycling Ventures Commercial Manager New Market Development, ExxonMobil

## DAY 04

Thursday 30 May | 08:00 – 17:00

### **Sustainable business operations in the value chain: A business differentiator**

#### **Keynote**

##### **Strategies for a sustainable value chain**

Anouk van Looveren, Country Manager, Dow Belgium, and Global Marketing Director, Dow

#### **Value Chain: Energy and feedstock transition**

##### **Research outline from TNO, Dechema and VITO**

Pieter Vingerhoets, Expert Energy & Climate Strategy, VITO/ EnergyVille

#### **Legislation**

##### **Doing business via a sustainable value chain**

Gauthier van Thuyne, Partner, Allen & Overy  
Fee Goossens, Counsel, Allen & Overy

#### **Legal challenges in the value chain**

##### **Due diligence and greenwashing**

Prof. Evelyne Terryn, Professor Commercial, Company and Consumer Law & Co-Director Consumer Competition Market, KU Leuven

#### **Carbon neutrality for chemicals Science based targets**

Dr. Michiel Stork, Director Sustainability, Guidehouse

#### **Transparency in the value chain**

**The digital product passport**  
Wouter Ghyoot, Vice President Government Affairs, Umicore

## DAY 05

Friday 31 May | 08:00 – 17:00

### **Exploring the myriad of pathways towards sustainability in 2050: long-term innovations and considerations**

#### **Keynote**

##### **Strategies towards a sustainable business**

Clara Carelli, Sustainability Director, Beaulieu

#### **Energy**

##### **The solution to the problem**

Pieter Lodewijks, Programme Manager, VITO / EnergyVille

#### **Biodiversity**

##### **A company perspective**

Sandrine Hellinckx, Head of Environment - Corporate Sustainable Development, Syensqo

#### **The process industry meets nuclear**

##### **Towards an integrated process**

Rafael Fernandez, Deputy Institute Director Innovative Nuclear Systems and Expert Group Leader Reactor Research and Engineering, The Belgian Nuclear Research Centre (SCK CEN)

#### **Renewable Carbon**

##### **Long-term research initiatives**

Michael Carus, Founder and Managing Director, Nova-Institut

#### **Closing Keynote**

##### **An industrial policy to transform the European Green Deal**

Florie Gonsolin, Director Industrial Transformation Projects, Cefic

#### **Closing Cocktail**

##### **Granting of certificates**

Yves Verschueren, Executive Director, essenscia

# IMPRESSIONS FROM PREVIOUS SESSIONS

