

**31st International Colloquium of GERPISA**  
**27-30 June 2023 / Brussels**

# **TOWARDS SUSTAINABILITY?**

**The Electrification of  
the Automotive  
Industry**



## **GIS GERPISA**

Direction  
Tommaso Pardi, CNRS, IDHES, ENS-  
Paris-Saclay

Team  
Sebastian Carbonell, Gerpisa, ENS-  
Paris-Saclay

Administration  
Cristelle Celton, MSH Paris-Saclay

<http://gerpisa.org>

Gerpisa (Groupe de Recherche Permanent sur l'Industrie et les Salariés de l'Automobile) is the main international network of research in social sciences on the automotive industry.

It is hosted by the ENS Paris-Saclay. It is also supported by the CNRS, by the French ministries of the Economy and of the Ecological Transition, by the Comité des Constructeurs Français de l'Automobile (CCFA) and by the Fédération des Industries des Equipements pour Véhicules (FIEV).

It receives scientific and administrative support from the MSH Paris-Saclay.

31st International Colloquium of Gerpisa

## **Towards Sustainability?**

# **The Electrification of the Automotive Industry**

The 2023 Gerpisa International Colloquium takes place in Brussels, at the Université Libre de Bruxelles and is co-organised with the METICES.

It is focused on the concept of sustainability and on the environmental, economic, social and political implications of the electrification process. The key, provocative question is: how (environmentally, economically, politically, socially) sustainable is this transition of the automotive industry toward decarbonized mobility?

### **Organising committee**

Juan Sebastian Carbonell, GERPISA, ENS Paris-Saclay, IDHES

Lorenza Monaco, GERPISA, ENS Paris-Saclay, IDHES

Tommaso Pardi, CNRS-IDHES, GIS-Gerpisa

### **Organising team**

Juan Sebastian Carbonell, GERPISA, ENS Paris-Saclay, IDHES

Cristelle Celton, MSH Paris-Saclay

Yara Hodroj, MSH Paris-Saclay

Giuseppina Meloni, METICES ULB

### **Online programme**

<https://gerpisa.org/en/node/7821>

## Tuesday, 27 June

08:00 - 8:30 : Registration

08:30 - 08:50 : Opening Remarks

Building B. Amphitheater B1.315



**Tommaso Pardi**  
Director of  
Gerpisa,  
CNRS, ENS-  
Paris-Saclay



**Meike  
Brodersen**  
Senior lecturer  
METICES,  
ULB



**Pierre Guibentif**  
Director of MSH  
Paris-Saclay



**Yara Hodroj**  
General Secretary  
of MSH Paris-  
Saclay

09:00 - 10:30 : Plenary 1

Amphitheater B1.315, Building B

### Catching up in Battery Manufacturing: European Responses to China's Hegemony and the US Inflation Reduction Act

**Moderator: Tommaso Pardi, Gerpisa, CNRS**



**Jean-Luc Brossard**  
Programme Director of the  
French Automotive Platform  
Vice-President Automotive  
Research & Advanced  
Engineering, Stellantis



**Matthieu Hubert**  
General Secretary of  
Automotive  
Cells Company

Co-organised with



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11:00 - 12:30 : Plenary 2

Room: Amphitheatre B1.315, Building B

## Electrification, Industrial Policy and the Future of the European Automotive Industry

**Moderator: Tommaso Pardi, Gerpisa, CNRS**



**Mark Nicklas**  
Head of Unit Mobility at  
European Commission



**Sigrid De Vries**  
Director General of the  
European Automobile  
Manufacturers'  
Association (ACEA)



**Benjamin Krieger**  
Secretary General of  
European Association of  
Automotive Suppliers  
(CLEPA)



**Céline Domecq**  
Head of Volvo Car EU  
office, Chair of the  
Platform for  
Electromobility

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12:30 - 14:00 : Lunch

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14:00 - 15:30 : Parallel Sessions 1

### Session 1: Consumers and Markets

Room: K4.201

Chair: Roberto Marx, University of São Paulo, Ecole polytechnique

- **Oliveira Filho, A. A., Consoni F. L., Rodríguez L. T. B., Rissi G. F., & Jordão E.**, Transition to electric mobility in Brazil: institutional development and advancement of new technology in the state of São Paulo
- **Jaderná, E., & Štrach P.**, Understanding Drivers and Barriers of Czech Consumers for Purchasing New Energy Vehicles
- **Smitka, M.**, Product differentiation: OEM strategy confronts consumers

### Session 2: Industrial Policies and Regulations 1

Room: K4.401

Chair: Tommaso Pardi, Gerpisa, CNRS

- **Alochet, M., & Midler C.**, When regulations shape the future of an industry, the case of the high voltage battery
- **Dziczek, K.**, Will the U.S. Inflation Reduction Act's Clean Vehicle and Manufacturing Subsidies Substantially Alter Light Vehicle Production and Supply Chain Decisions?
- **Weis, N.**, The policy-induced transition to electric vehicle production in Germany: Contradiction and coalitions between State and Industry

### Session 3: Digitalisation and Electrification of the Supply Chain

Room: K4.601

Chair: Lorenza Monaco, UCL Institute for Innovation and Public Purpose

- **Calabrese, G. G., Falavigna G., & Ippolitii R.**, Innovation policy and industry 4.0: new evidence from the Italian automotive supply chain
- **Santin, J. C., & Stevens M.**, Tech and trust: Substitutes or complements at the buyer-supplier interface?
- **Becker, T., & Russo M.**, Complexity and Specialization in Clusters of European Automotive Regions: Mapping the Potential in Electric Transition

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16:00 - 17:30 : Parallel sessions 2

### Session 4: Global Value Chains and Labour

Room: K4.201

Chair: Lorenza Monaco, UCL Institute for Innovation and Public Purpose

- **Naranjo Bejarano, C.**, EV transition in the Japanese automotive industry in Mexico: The case of Nidec Corporation
- **Perez Almansi, B., & Pinazo G.**, The recent evolution of the Argentinian automotive industry and its attempt to develop the Electric Vehicles value chain.
- **Rodríguez, J. D.**, The new international political economy of the automotive industry: deglobalization trends and challenges for Mercosur

### Session 5: Industrial Policies and Regulations 2

Room: K4.401

Chair: Samuel Klebaner, CEPN, Université Paris 13

- **Fu, H.**, Powering Up Electric Vehicles in China: The Role of Non-fiscal Incentives in Promoting Electric Vehicle Adoption amid Declining Fiscal Subsidies
- **Pardi, T.**, Addressing the past failures of the European CO2 regulation for cars and vans: does the “fit for 55” update meets the challenge?

### Session 6: Innovation and Value Creation

Room: K4.601

Chair: Giuseppe Giulio Calabrese, CNR-Ircres

- **WU, C.(C.), & Wang H.**, Mechanism of Value Co-creation in the NPD – the Case of the Chinese Electric Vehicles
- **Carrillo, J.**, A new innovation ecosystem? Cooperation between companies for the new automotive mobility
- **Frigant, V., Sauve H., & Dimitrova Z.**, Mapping an extensive Technological Innovation System perimeter using Technology Intelligence: An Application to Hydrogen vehicles

## Wednesday 28 June

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09:00 - 10:30 : Parallel sessions 3

### Session 7: Factors of innovation: technology and practices

Room: K4.201

Chair: Marc ALOCHET, Ecole Polytechnique

- **Novaresio, A.**, Innovation dynamics in the European automotive industry: the Schumpeterian role of car trade in the supply chain
- **Baba, T.**, Resilient and Sustainable Operations: Beyond the COVID-19 Pandemic
- **Zhou, P., & Wang H.**, Examining the Role of Community of Practice in the Electrification of Chinese Automobile Industry

### Session 8: The Battery Value Chain

Room: K4.401

Chair: Stéphane Heim, Kyoto University

- **Acerbi, B., & Russo M.**, Do battery trade shows reveal a changing pattern in the automotive transition? An empirical analysis of the dynamic attendance rate
- **Jetin, B.**, Electric batteries and critical materials dependency: a geopolitical analysis of the USA and the European Union
- **Maselli Filho, M., Marx R., Mello A. M., Pelegrina J., & Valsecchi J.**, Life Cycle Assesment of Battery Electric and Internal Combustion Engine Vehicles: Case Studies Considering Multiple Factors

### Session 9: Circular economy

Room: K4.601

Chair: Adriana Marotti de Mello, University of São Paulo

- **Jeppe, A., Eickhoff M., Kraus L., & Proff H.**, Economic potential of second-life applications of car batteries for solar storage in Brazil to secure energy supply
- **Lee, J.**, Development Process of Automobile Scrapping and Recycling System in South Korea and its Response to Electrification
- **Techakanont, K., & Homklint T.**, A prospect towards circular economy in creating ELV recycling system in Thailand

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11:00 - 12:30 : Plenary 3

Room: Amphitheatre B1.315 / B Building

### The EU Green Deal: NGOs' Perspectives on Electrification

**Moderator: Tommaso Pardi, Gerpisa, CNRS**



**Alex Keynes**  
Transport and Environment  
Manager, Clean Vehicles



**Lorelei Limousin**  
Climate, energy and transport  
campaigner, Greenpeace  
European unit



**Jacques Portalier**  
Project leader Automobile  
Industry of the Shift Project

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12:30 - 14:00: Lunch

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14:00 - 15:30 : Parallel sessions 4

### Session 10: Labour and Technological Change

Room: K4.201

Chair: Jesús F. Lampón, UNIVERSITY OF VIGO

- **Candeias, M., & Moniz A.**, Will AI in the automotive sector be a challenge to the product electrification? Which consequences for labour in Portugal?
- **Carrillo, J., Martinez A. M., Lopez O., & Diaz M.**, The automotive sector in Mexico. The impact of automation and digitalization on employment.
- **Russo, M., Simonazzi A., & Cetrulo A.**, The impact of I4.0 on work in the automotive sector in Romania and Spain

### Session 11: Industrial Policies and Regulations 3

Room: K4.401

Chair: Giuseppe Giulio Calabrese, CNR-Ircres

- **Bubbico, D.**, Industrial policies to support automotive sector at national and European Union level: which forms of governance?
- **Di Maria, E.**, Industrial policies to support automotive competitiveness: a cross-country comparison
- **Beltrametti, L.**, Policies supporting demand for electric vehicles in Europe

## Session 12: NGOs' alternative views for the future of mobility

Room: K4.601

Chair: Tommaso Pardi, CNRS-IDHES, GIS-Gerpisa

- **Hildermeier, J.**, Transportation Electrification in the European Green Deal. How do recent EU policies support electric vehicle growth and their smart integration into the energy system ?
- **Petit, M., & Teuber A.**, Europe as an intermodal mobility leader – why, how, and what could be the socioeconomic effects?
- **Chadha, S.**, Policies to drive the Fleet transition in Europe - France Case Study

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## 16:00 - 17:30 : Parallel sessions 5

### Session 13: Labour & Management

Room: K4.201

Chair: Margherita Russo, University of Modena and Reggio Emilia

- **Novaresio, A.**, The greening of the European automotive industry and its labor effects: an empirical analysis
- **Collodoro, C., & Virgillito M. E.**, Financial Ownership in the Automotive Industry: Impact on the Firm-Level Wage Share.
- **Švejdarová, E.**, Managerial Skills and Competencies for Effective Transition to Electromobility

### Session 14: The Global South in the Electric Vehicles Global Value Chains

Room: K4.601

Chair: Martin Schroeder, Ritsumeikan University

- **Raj, A.**, Global Value Chain and a Green Eyewash: Locating Labour in the Electric Automotive Sector in India
- **Ghafs, Z.**, Exploring the Evolution of the Automotive Ecosystem in Morocco: Insights from Semi-Structured Interviews
- **Monaco, L., & Simon H.**, Protecting Human and Environmental Rights in the Auto Supply Chain: the new German Due Diligence Law seen from Africa

### Session 15: New Mobilities

Room: K4.401

Chair: Meike Brodersen, METICES, ULB

- **Alochet, M., Duffie J. P. M., & Midler C.**, Mobility Services and Vehicle-as-Platform: How Disruptive to Product and Industry Architecture?
- **Proff, H., Kraus L., & Jeppe A.**, Illuminating Mobility as a Service ecosystems using natural language processing
- **Moure, H. P., Lampón J. F., & Cabanelas P.**, The Trends in Mobility's New Business Models. A Case Study Applied to Automobile Manufacturers.

## Cocktail at the Tram Museum

Departure at 5:45 pm from tram stop ULB (direction Louise - see map p.15)



**Thursday 29 June**

09:00 - 10:30 : Parallel sessions 6

### Session 16: Labour and Just Transitions 1

Room: K4.201

Chair: Juan Sebastian Carbonell, GERPISA, ENS Paris-Saclay, IDHES

- **Gaddi, M.**, Between ecological transition and lack of industrial policies: the Italian case
- **Gažo, P.**, Automotive Workers in the Era of Just Transition
- **Klebaner, S.**, Transition of the automotive industry to an ecological mobility industry: the french case

### Session 17: Industrial Policies and Regulations 4

Room: K4.401

Chair: Roberto Marx, University of São Paulo, Ecole polytechnique

- **Boavida, N., & Moniz A.**, Value chain transitions towards automotive industry electrification: impacts in Portugal
- **Zirpoli, F., & Moretti A.**, The impact of electrification on the Italian automotive supply chain
- **Domanski, B., Guzik R., & Gwosdz K.**, A threat or a window of opportunity? Poland in the face of transition towards electromobility

### Session 18: The Evolving Auto Value Chain 2

Room: K4.601

Chair: Vallejo Bertha, University of Johannesburg

- **Flori, E., Caruso G., Pattarin F., & Solinas G.**, The Evolution of Global Value Chains in the Automotive Industry
- **Schröder, M.**, Towards a New Division of Labour? Industrial Policy and the Electric Vehicle Value Chain in ASEAN
- **Hrubý, M., & Šaroch S.**, Economic Regulation Contra Increasing Returns and Path Dependence in the Automotive Industry: A Story of EU and China

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**11:00 - 12:30 : Plenary 4**

Room: Amphitheatre B1.315 / B Building

### **Just Transitions: Social Justice, Trade Unions and Electrification**

**Moderator: Bela Galgoczi, European Trade Union Institute**



**Benjamin Denis**

Senior policy advisor  
IndustriAll Europe



**Benoît Ostertag**

Federal Secretary CFDT  
FGMM France



**Hans Joachim Gericke**

General Secretary of the  
European Committee of the  
Regions' Future of the  
Automotive Industry  
interregional group (CoRAI)

Co-organised with  **industriAll**  
EUROPEAN TRADE UNION

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**12:30 - 14:00 : Lunch**

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**14:00 - 15:30 : Parallel sessions 7**

### **Session 19: Labour and Just Transitions 2 / ETUI Panel**

Room: K4.201

Chair: Tommaso Pardi, CNRS-IDHES, GIS-Gerpisa

- **Galgoczi, B.** On the way to electromobility – a green(er) but more unequal future?
- **Palliet, E.**, Electrification and employment in the French automotive industry
- **Czirfusz, M.**, Hungary's alternative low-road model for the integration in the European battery value chain

## Session 20: Industrial Policies and Regulations 5

Room: K4.401

Chair: Bruno Jetin, University of Brunei Darussalam, Institute of Asian Studies

**Kuyo, A.**, The battery Rules of Origins in the UK-EU TCA : the great delusion?

**Wang, X., Ruet J., & Grebert J.**, Transforming the Automotive Industry with the Circular Economy Model

**Bungsche, H.**, From Automobile Industry to Mobility Industry? TOYOTA and Japan's automobile industry and mobility policies

## Session 21: The Evolving Auto Value Chain 3

Room: K4.601

Chair: Martin Schroeder, Ritsumeikan University

- **Cabral, V. M., Vallejo B., & Mordue G.**, Supply chain resilience under long-term external shocks: the case of an international first-tier automotive supplier in Mexico
- **Alkire, K.**, The Emerging Closed-Loop Automotive Battery Supply Chain in the United States
- **Klier, T., & Rubenstein J.**, From ICE to EV Production in Europe: Industry Geography in Transition

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16:00 - 17:30 : Parallel sessions 8

## Session 22: Labour and Just Transitions 3

Room: K4.201

Chair: Holger Bungsche, School for International Studies, Kwansei Gakuin University

- **Cetrulo, A., Dosi G., Moro A., Nelli L., & Virgillito M. E.**, Automation, digitalization and decarbonization in the European automotive sector
- **Luethje, B.**, Foxconnization of Car Manufacturing? Production Models and Labor Relations in the EV Industry in China
- **Heim, S.**, The Electrification of the Japanese Automotive Industry: Preliminary Results on the Reshaping of the Fordist Wage-Labor Regime

## Session 23: Latin-american transitions

Room: K4.401

Chair: Jorge Carrillo, El Colegio de la Frontera Norte

- **Covarrubias, A. V.**, Mexico as the unlikely winner in the auto sector. A review of firm localization strategies and labor relations transitions theories.
- **Barassa, E., Consoni F. L., Moraes H. B., Cruz R., & Ludwig M. A.**, Paving the way for electric mobility in Brazil: the construction of the National Roadmap for Infrastructure as a driver for the market, policies and new technologies

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17:30 - 18:00

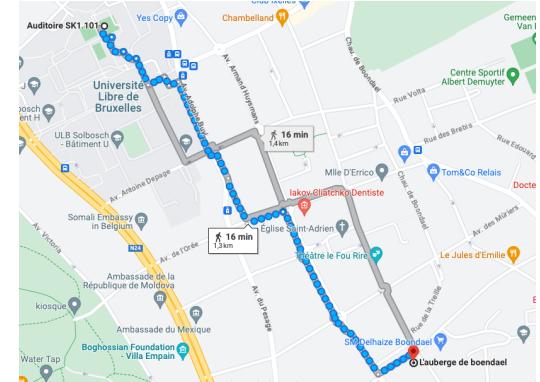
Room: Amphitheatre B1.315 / B Building

**Final Remarks**

## Gala Dinner Auberge de Boendael

19:30 - Sq. du Vieux Tilleul 12, 1050 Bruxelles

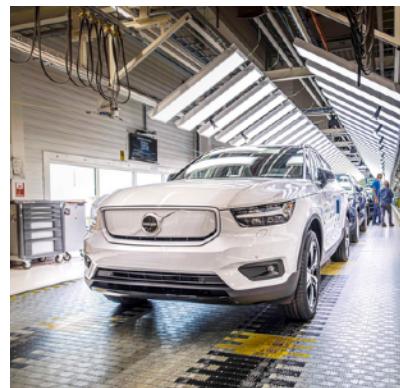
Tram stop Marie-José - lines 8, 25



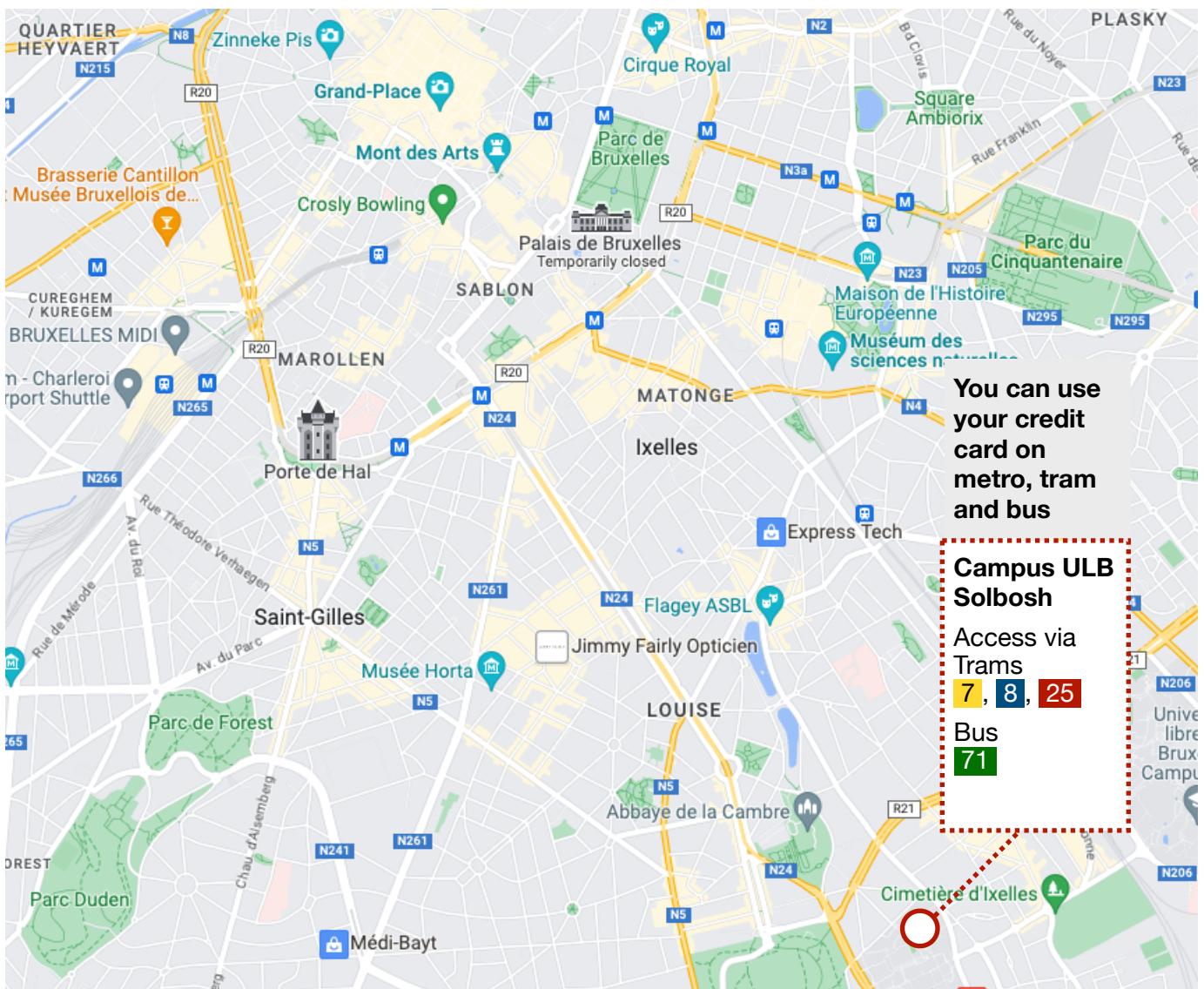
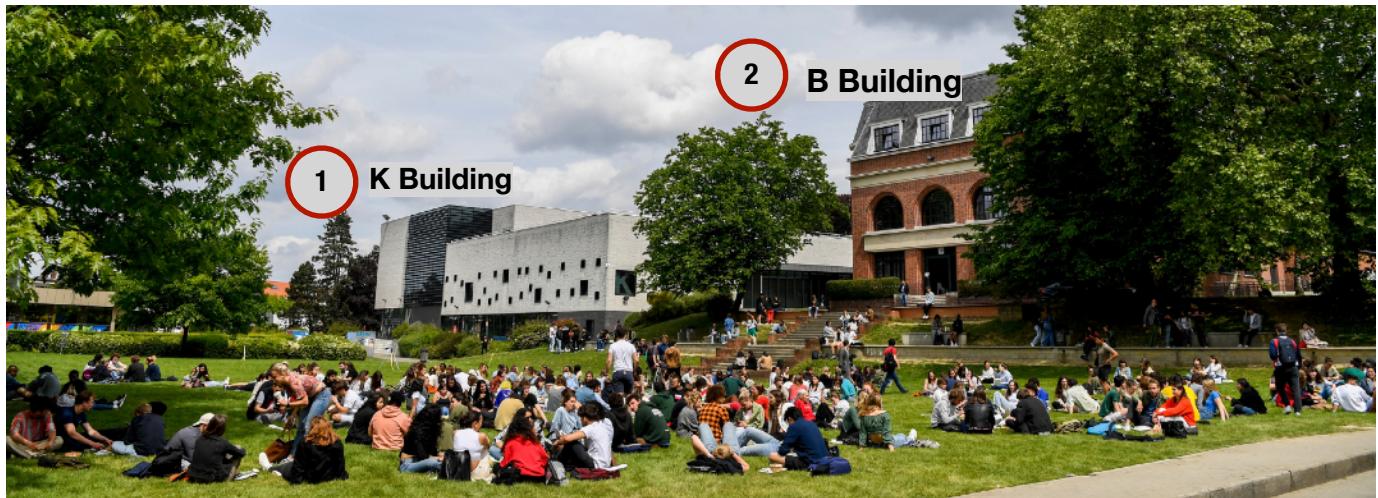
## Friday 30 June Factory Tour Volvo Car Gent

8:15 am departure / 1:00 pm return

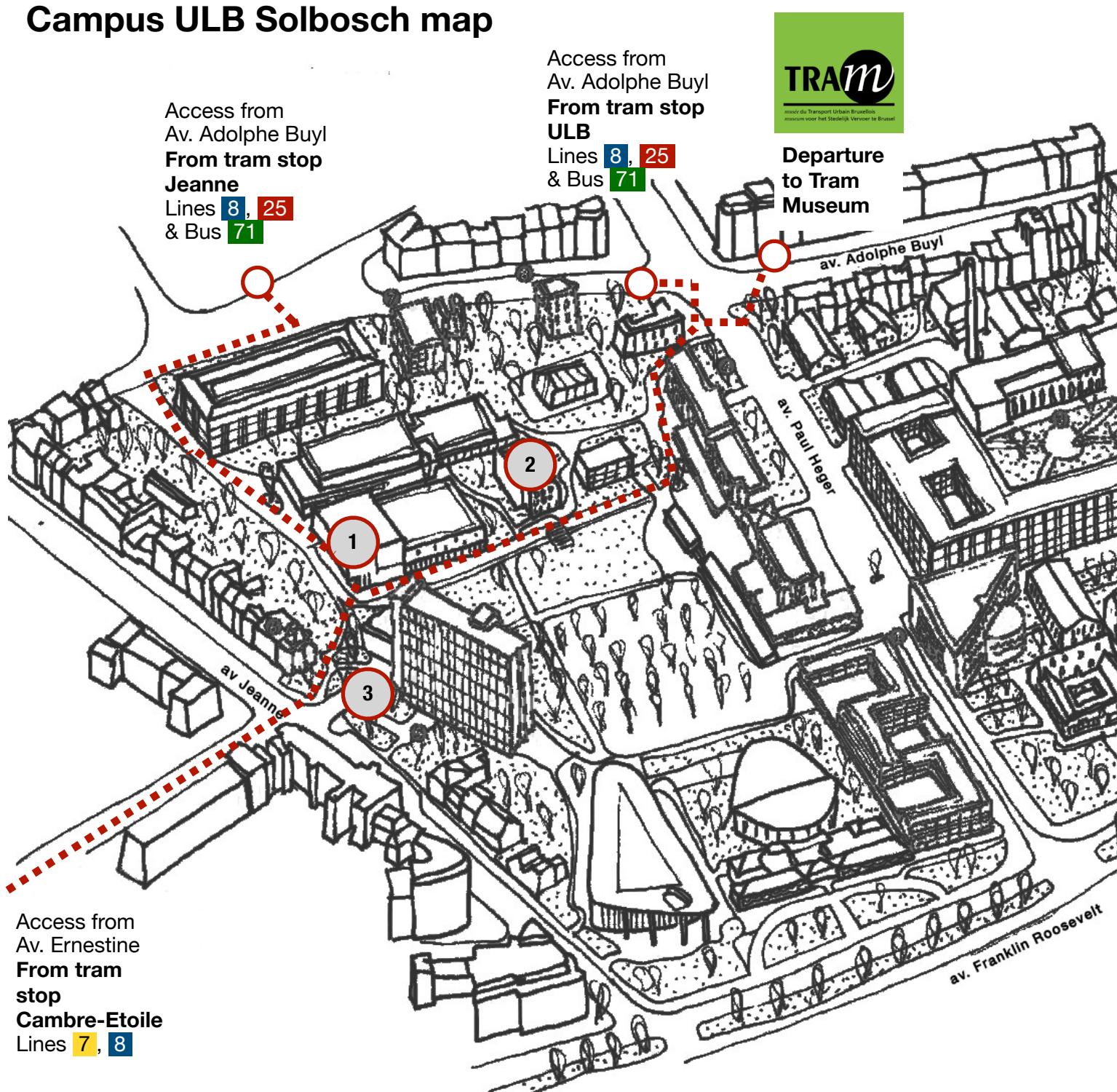
Departure and return point: ULB, Avenue Jeanne / S Building (see map p.15)



# Campus ULB Solbosch location



# Campus ULB Solbosch map



## 1 K Building

Registration  
Coffee breaks / Lunch

**Parallel sessions**  
Rooms K4.201 / K4.401  
K4.601

## 2 B Building

**Plenaries**  
Amphitheatre B1.315

## 3

## S Building

Departure and return point  
for the factory tour to  
Volvo Car Gent

**BRUSSELS**

27-30 June 2023

# **Towards Sustainability? The Electrification of the Automotive Industry**

