

Climate-KIC Cities Course Sustainable Mobility and Air Quality

10-12 March 2016 - Amsterdam, Schiphol, Rotterdam

For city project managers, advisors, business
managers, change agents



Climate-KIC is supported by the
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Climate-KIC Cities Course

Sustainable Mobility and Air Quality

Grasp the potential of clean mobility

Cities face complex challenges in our fast moving and changing world. Urban mobility is one of the largest problems: city transport accounts for 40% of CO2 emissions and 70% of other pollutants of global road transport. The main challenge is to enhance mobility in urban areas while at the same time reducing congestion, accidents, and pollution, and keeping the cities attractive for tourists and residents. These challenges offer many opportunities for innovative solutions. There is potential for business in new mobility technology. Cities should facilitate these new developments by, for instance, building the right charging infrastructure for electric cars. At the same time they have to implement the right policies to stimulate sustainable mobility with financial incentives for clean mobility or regulations such as an environmental zone. Finally, policy plays an important role in integrating the mobility mix with other functions in the city, and improving the flow in our public spaces.

Leading experts

Our course offers workshops with top specialists of leading knowledge institutions in the Netherlands like: Amsterdam Metropolitan Solutions (AMS), Delft University of Technology, Eindhoven University of Technology and

Rotterdam University of Applied Sciences. Professors will share their vision on sustainable mobility, giving participants a glimpse into the future of the metropolis. In 2040, we could be driving in fully automated vehicles that generate power with their fuel cells when parked.

Speakers from companies like Tesla, Schiphol, APM Terminals and several mobility start-ups will prove that this future is near and unavoidable. Upon arriving at the Dutch national airport, travellers already reach the terminal with zero emission busses and take an electric taxi to the city of Amsterdam. This Tesla car keeps an automated distance to the vehicle in front of it and is able to make an emergency stop when the driver is not paying attention.

During these three days, best practices from the municipalities of Amsterdam, Rotterdam and Utrecht help the participants to view these innovations from a city governmental perspective. Cities should create an environment where new ideas become actual projects, and they need to stimulate the innovations of today and tomorrow. Even citizens of cities can bring about change in the energy chain, by determination and the right partnerships. Something that we will learn during the part of the programme about decentralized power systems and their relation to electric mobility.

For Whom?

This course is for city project managers, advisors, business managers, and change agents that want to know how to:

- implement innovations that increase sustainable mobility, air quality, and the attractiveness of the public space of cities;
- use a systematic approach to realize transitions in their city that improve traffic flow and reduce CO2 emissions;
- fund their own sustainable mobility project and involve the right stakeholders.

Does this apply to you and are you interested to know which factors are of importance for the rise of sustainable mobility and how to advise others on those aspects? This three-day course will be perfect for you. The programme welcomes both the public and the private sector, creating many networking opportunities, as the presenting experts also have varying backgrounds.

City project managers

In the next years there will be many challenges surrounding mobility, also for local governments. This course provides policy advisors, managers and administrators insights into the subjects that are necessary to implement the policies successfully. Questions on how to advise companies to utilize the business potential of new ways of transportation, and how to enable them to offer citizens those services cost effectively, will be reflected on.

Entrepreneurs and decision makers of the private sector

Entrepreneurs and change agents of the commercial industry will find out what economic opportunities are offered by the transition of the mobility and energy sectors. Which sustainable solutions are present? Which solutions are still in development, and what will be their consequences for organizations and municipalities? The different (commercial) cases will be an inspiration for your own business and might spark ideas for new business cases.

Learning Objectives

After the course participants are able to apply a system approach on their own practice. They learn about:

- Infrastructure – how infrastructure can be effective and attractive. How can we manage traffic flows and improve safety? And what does the next generation infrastructure look like?
- Vehicles – you will get scientific and practical insight on hydrogen, electric mobility, well-to-wheel efficiency and multimodal possibilities. What are the myths about these new possibilities?
- Environment – How to reduce CO2 emissions and other toxic gasses and decrease your city's environmental footprint?
- Finance and stakeholders – How to involve stakeholders and fund your project. What are the success factors of introducing new solutions to your city?
- Policy measures: Getting to know policy measures and decisions at European, national and local level.
- Systematic approach: Learn how to use an interdisciplinary system approach in which your own project or challenge functions as starting point. Legal, financial, economical, technical, and political factors and the wellbeing of citizens are taken into account.



Visiting Hollands best practices and working on your project

Site visits

The Netherlands is a world class test bed for sustainable mobility, thanks to the limited scale of the country and cooperating parties. During the three course days we will visit interesting sites in the cities of Amsterdam, Rotterdam and at the national airport Schiphol. Such as:

- Electric bus facilities, a solar field, shore power for planes at Schiphol
- Large scale Tesla Taxi charging facilities at Schiphol
- Innovative solutions developed by start-ups at YES!Delft incubator
- Clean harbour freight transportation on land reclaimed from the sea at APM Terminals Maasvlakte II Rotterdam
- Student projects in a former submarine hangar at the RDM campus in Rotterdam

Working in a small group on your own project

In our course, we offer an interdisciplinary system approach in which your own project or challenge functions as a starting point. Each day will build upon your own case. The aim is to inspire and empower participants to increase sustainable mobility and improve air quality in cities. During these three days our professional coach stimulates a process in which participants discover in small groups how they can come up with the best solution for their city. The maximum number of participants is 25, leaving enough room for personal attention, questions, and discussions. The approach is also based on mutual learning from the other participants. There will be plenty of time to get to know each other and for networking, during breaks and the evenings.

Professional coach

Participants are challenged to bring and work on their own project/challenge throughout the course, using the system approach. We will work with the Multiple Level Perspective and use the method of transitioning in order

to improve your own projects, or finding answers (and the right questions) for your challenges. Supported by our coach, top experts, and fellow participants you will analyse and develop a solution to your own problem, built up from different parts of the system. In addition, you will become a part of a large network of European managers working on sustainable cities.



José Andringa, professional coach.

Application information

This three day course costs € 750 (excl. VAT), including hotel [SS Rotterdam](#) (2 nights), lunch and dinner, transport during the course. Excluding travel costs. See the [website](#) of Climate-KIC to apply for this course (www.climate-kic.org).

Climate-KIC

Climate-KIC (www.climate-kic.org) is Europe's largest public-private innovation partnership, working together to address the challenge of climate change. We drive innovation in climate change through creative partnerships large and small, local and global, between the private, public and academic sectors.

RVO

Netherlands Enterprise Agency (RVO.nl) encourages entrepreneurs in sustainable, agrarian, innovative and international business. It helps with grants, finding business partners, know-how and compliance with laws and regulations.

Dutch-INCERT

Dutch INCERT (Dutch Innovation Centre for Electric Road Transport, www.d-incert.nl) is the Dutch knowledge and innovation network for Electric Transport and Mobility, founded by Dutch universities. It is a network of excellence that fosters and coordinates research collaboration and develops joint activities of industry and science to accelerate the electric mobility transition in the Netherlands.





Day 1

Thursday, March 10

Schiphol & Yes!Delft incubator

Technology and Business - innovations, start-ups and smart solutions

The first day of the cities course will focus on the business and technology side of sustainable mobility. What innovations take place at this moment and how is personal transport going to change in the near future? Participants arrive at Schiphol airport where the programme kicks-off immediately. During this day they will learn about the technology and businesses from different perspectives. The visions of independent scientists on the future possibilities of technology are combined with the present day context of a large company like Schiphol, Tesla and young start-up companies. All this gives an overall picture of present day and future technological opportunities and trends.

Before heading off to Yes!Delft, the start-up incubator of the Delft University of Technology, we will briefly visit the Tesla Taxi charging site of the BIOS-group. During the concession for the main taxi stand in front of the arrivals hall of the airport, Schiphol required the tendering taxi companies to offer electric cars. The two winners of the concession, BIOS-group (owning 71 Tesla cars) and BBF-Schipholtaxi (with 96 Tesla's), had to install their own charging infrastructure.

The EU urban mobility strategy

Daniela Rosca joined the Directorate General for Mobility and Transport of the European Commission in 2010. She has been Head of the Clean Transport and Sustainable Urban Mobility Unit since July 2011. She joined the Commission in 2000, at its Representation in Romania, where she was mainly responsible for media relations and communications. She has a Master's degree in Public Policies in Europe from the Institute of Political Sciences, Robert Schuman University in Strasbourg.



Daniela Rosca



The car as an iPad on wheels

Smart Mobility is one of three strategic areas of the Technical University of Eindhoven, along with energy and health. According to Professor Maarten Steinbuch, in 2040 a car will arrive at our door when we need it. The interior will adjust to our personal taste and we will relax with our digital newspaper while the vehicle brings us to our destination. This car will be fully automated, safe, electric, and efficient, an "iPad on wheels."

Speaker

Maarten Steinbuch is Professor of Systems & Control, scientific director of the TU/e High Tech Systems Center, and the 3TU Research Centre High Tech Systems of the Federation of Dutch Technical Universities.



Maarten Steinbuch



Tesla's charging and renewable energy strategy

Tesla is radically innovating the automotive industry, bringing the electric car to the mainstream market. Their flagship Model S has a range of over 400 kilometres on one battery charge and the fastest version reaches 100 km/h in less than 3 seconds. Tesla approaches the charging challenge in a compelling and scalable way. Crucial factors are the unique proposition of having your car fully charged each morning, as well as solving the long distance challenge. These issues are integrated in a fully renewable energy chain.

Speaker

Jelle Vastert is Head of EV Infrastructure Europe of Tesla. He started at the company working specifically on the European Supercharger Programme. Before this Vastert was director business development & strategy at Better Place, the company that had the mission to develop and exploit an innovative charge network around battery switch stations and smart energy integration.



Jelle Vastert



Unique site visit Schiphol

Schiphol Amsterdam Airport is actively working on integrating sustainable mobility in their passenger process. At the airport there are 35 electric busses in operation to transport passengers from and to the airplanes. These are very short rides and therefore very suitable for electric vehicles. We will learn that internal discussions should focus on process optimization, sustainability, customer satisfaction, and working conditions of the drivers. We will visit the airports electric bus facilities, solar field and shore power for planes.

Speaker

Arno Veenema, currently Manager Airside Authority at Schiphol Airport, previously among other things responsible for passenger transport between terminal and aircraft. 16 July 2013 Schiphol signed a contract for 35 electric busses and charging stations. This transition to zero emission transport was initiated by Arno Veenema and he was also the commissioning party of the project.



Arno Veenema



The car as a power plant

The Delft University of Technology is building a green village on its campus, in order to showcase on a small scale the possibilities for green cities of the future. Part of the plans for this testing ground is the car as a power plant. Fuel cell cars can provide more efficient and cleaner transportation. These cars also solve the range of problems of current electric vehicles with a battery as energy carrier. The required hydrogen can be produced from gas (natural gas, biogas) or electricity (hydro, wind, and solar). In the end these fuel cell cars can replace all power plants worldwide.

Speaker

Prof. Dr. Ad van Wijk (1956) is one of the most influential sustainable energy entrepreneurs and innovators in Europe. In 1984 he co-founded the sustainable energy knowledge company Ecofys, which eventually grew into Econcern. As chairman of the executive board, he led and developed Econcern into a company with 1200 people in more than 20 countries, sharing the mission 'A sustainable energy supply for everyone'. Nowadays he is an independent sustainable energy entrepreneur and advisor, and Professor in 'Future Energy Systems' at the Delft University of Technology.



Ad van Wijk



Yes!Delft start-up and hydrogen technology

During the evening of the first programme day, our dinner will be at Yes!Delft. At this start-up incubator we will take a look around the facility. Besides a lecture focused on future opportunities or maybe even necessities of using hydrogen technology, there is time to do some networking and meet young owners of start-up companies. This incubator accelerated 140 companies since 2005, which resulted in 793 cases of direct employment of mainly young professionals, and an invested capital of over 110 million Euros (excluding the large takeovers). This puts Yes!Delft in the top of Europe's favourite places to invest.

Startups Yes! Delft

Carice. Technology of the future in a traditional design



Ephicas (WABC). Fuel saving aerodynamic add-ons for road freight, such as truck side wings



E-trailer. The technology of the fastest solar energy car of the Nuon TU Delft Solar Team on trailers: electric motors integrated in the wheels.



YES!Delft incubator

Site Visit and overnight accommodation SS Rotterdam

During the course we are spending the night at the SS Rotterdam. On 3 September 1959, SS Rotterdam was on its way to New York for the very first time. After that, 'La Grande Dame' has spent more than 40 years sailing the seven seas. Until in 2000, when the owner went bankrupt and the ship was 'stranded' at the port of Freeport in the Bahamas. The City of Rotterdam recognised opportunities for the city and decided to grant the popular ship a permanent berth in Maashaven in the Katendrecht district. In 2005, tugboats transferred the SS Rotterdam from Gibraltar to its home town. One of the larger housing corporations in the Netherlands made sure the old steamship served a new commercial, recreational, and training purpose. The SS Rotterdam was rescued and given a second life.



Electric buses at Schiphol



Tesla taxi at Schiphol



Day 2

Friday, March 11

Rotterdam and RDM Campus

System integration - Stakeholders, finance and regulation

After a day of innovations and future transitions, this part of the programme will give you a perspective of the context in which all this takes place. Within which system does the subject of sustainable mobility fit? Which way can we influence the developments by including the right stakeholders at the right time? How do we make sure that our projects and initiatives will be financed? And which regulations are a factor? All these questions will play a central role in the programme of the second day. These topics will be accompanied by some examples of best practices. One example is that of a venturing citizen of Utrecht who, together with an energy distributing company, made sure that the renewable electricity that is generated in his neighbourhood is directly linked to the electrical vehicles.

We will spend the day at RDM Rotterdam which is the foremost innovative showcase of the Rotterdam harbour, where technology is made visible in an attractive way. The RDM offers room for companies, research facilities, and knowledge institutes. Together they work on shaping the new production systems for the port and the city. During the break there is time to walk around the innovation dock.

Site Visit APM Terminal at Maasvlakte II harbour

APM Terminals gives insight on how during the construction of the harbour the company integrated as many electric solutions as possible. We will be guided around the terminal and take a close look at one of the enormous battery packs of an Automatic Guided Vehicle (AGV) in maintenance. Sustainability is obviously a great advantage, but this visit will show that process optimisation can be achieved by avoiding combustion engines.



APM terminals, from the sea reclaimed land

Speaker

Patrick van den Berg is Project Manager Equipment Maasvlakte II. For APM Terminals he has been working on the equipment and construction of the container terminal in this new harbour area. Among other things he is responsible for purchasing and operationalization of Automatic Guided Vehicles (AGV) for the loading and unloading of container ships.



Patrick van den Berg

APM TERMINALS
Using Green Tech.

Economic and energy efficiency perspective on future mobility

How do we make sustainable vehicles and the connected services economically feasible? To answer this question we look at the social, economic, and technological factors. The dominant view is that electric cars are too expensive, especially compared with conventional cars. Is this true? We analyse this statement from different perspectives and base our answer on case studies.

Speaker

Frank Rieck (1954) is lector Future Mobility at the Hogeschool van Rotterdam, Deployment Manager for e-Traction and chairman of Dutch-INCERT. As lector in Rotterdam, Rieck realized the eMobility-Lab that focusses on electric vehicles within urban areas. Research into regenerative braking, safety and the costs of use and maintenance of electric cars are key aspects of the eMobility-Lab.



Frank Rieck



dutch-
incert
ROTHTERDAM
INSTITUTE FOR
ELECTRIC AND
HYDROGEN
TRANSPORT

Vision on energy carriers

Next to electric mobility and hydrogen fuels, there are more options for sustainable fuels, such as biofuels and

renewable gas. The ministry of Infrastructures and the Environment (I&E) worked together with 100 organizations to create a sustainable fuel vision. They included the fuel source of the vehicles, as well as the well to wheel production chain consequences of the different options.

Speaker

Els de Wit is deputy head of the division cars and fuels within the Ministry of Infrastructure and Environment. As coordinator for fuels for the transport sector she and her team were responsible for the sustainable fuel vision and action plans that were drawn up last year under the remit of the Social Economics Council Energy Agreement on request of the present Dutch Cabinet. Els's team currently works on the implementation of the strategy, several innovation projects and Green deal projects for the transport sector.



Els de wit

The role of the vehicle approval authority in road safety and the environment

Since the Volkswagen scandal the regulations around emission have become a widely discussed topic. During this part of the course, the focus will be on the role of the vehicle approval authority in road safety and the environment. The Department of Road Transport, the RDW, is the national motor vehicle authority responsible for the safety of, and environmental regulation on, the motor vehicle fleet of the Netherlands. The RDW measures the emissions in cities, and translates these measurements into advice.

Speaker

Arjan van Vliet is International project manager and senior advisor strategy and external developments at the RDW. From 2003 until now he is responsible for more than a dozen projects with regard to motor vehicle testing, approval, and registration in for example Russia, Romania, Bulgaria, Slovenia, and the Antilles. He provides information

to domestic and foreign authorities, advises interested parties and joins discussions at the EU and ECE levels. He plays a role in the international information exchange and he cooperates in combating fraud, crime, and terrorism.



Arjan van Vliet



Site visit RDM Campus

In the morning we arrive at the RDM Campus, by waterbus, after having had breakfast on our 'ship hotel' the SS Rotterdam. RDM Rotterdam is the foremost innovative showcase of the Rotterdam harbor, where technology is made visible in an attractive way. The former shipyard of the Rotterdamsche Droogdok Maatschappij (RDM) is located in the middle of the harbor, while it remains close to the city. The RDM offers room for companies, research facilities, and knowledge institutes. Together they work on shaping the new processing sector for the port and the city. Students work on their practical projects in a very large former submersible dock and business meetings are held in the former directors' room of the RDM. During the break there is time to walk around the innovation dock.



Mobility and systems design

Maarten Bonnema is associate professor Multidisciplinary System Design at the University of Twente and associate professor at the Norwegian Institute of Systems Engineering (NISE), part of the University College of Southeast Norway. Bonnema focusses on applying systems engineering and -thinking in the electric mobility sector. His presentation will give insight into which actors and dimensions play a role in the speeding up or slowing down of the transition towards electric mobility. He will present a system perspective in which Bonnema's focus is not only on the vehicle, but also on infrastructure and (potential) users.



Maarten Bonnema

UNIVERSITY OF TWENTE.

LomboXnet: decentral generation and the direct connection to electric vehicles with smart grids.

The district of Lombok, in the city of Utrecht, had a world's first with their 'Vehicle-to-Grid' charging pole. This is a 'smart' charging pole for electric vehicles. The pole can charge the car with solar energy, but can also use the car as a temporary storage for the solar energy. The regions ambition consists of the construction of 1000 of these 'Smart Solar Charging'-poles. The smart charging infrastructure is connected to the solar panels of the neighboring houses, office buildings, and public buildings, such as schools.

Initiators and speakers

Robin Berg is the owner of LomboXnet, he created the Vehicle-to-Grid system in his own backyard, and tested it in his own neighbourhood. With local electricity generation, storage, and end use, he designed a solution that prevents the electricity grid from getting overloaded when the number of electric vehicles takes off. Due to the 'smart' charging infrastructure, solar energy can be stored when

the electricity demand is low. Together with the local grid owner Stedin, and the municipality of Utrecht, Berg is developing the Vehicle-to-Grid network for the whole region.



Robin Berg



Baerte de Brey is manager of electric mobility within Stedin, a local network management company with approximately two million customers. Baerte is responsible for analysing the long-term effects of electric mobility on the electricity grids, and for building a sustainable business case around this transition. This includes vehicle2grids, EV-storage, and customer behaviour research. As an expert for the European Commission he reviews collective European programmes concerning EV interoperability and smart charging.



Baerte de Brey



Dinner at Hotel New York in Rotterdam

Hotel New York is situated in the beautiful former head office of the Holland America Line. This office was built in the Jugendstil style in 1901, and is also known as 'The Grand Old Lady'. From this place in Rotterdam, thousands of emigrants left for North America, hoping for a better life. As soon as you enter the building, you can feel it: this is where it all happened. The sense of nostalgia is everywhere. From the cast-iron hotel staircase and the numerous trunks and pictures of emigrants to the former offices of its past directors.



Day 3

Saturday, March 12

Amsterdam City Mobility

Air Quality, traffic flow and infrastructure

This final part of the course we are visiting the Amsterdam institute for advanced Metropolitan Solutions (AMS). After a day of innovations and a day of system context and integration, we finish the programme with a more practical city level. How can we analyse these mobility problems and opportunities when we look at extensive flows in a big city like Amsterdam? What kind of design and test bed projects that involve scientists, entrepreneurs, and governments can change our mobility system? After the perspective of AMS we learn how a project manager from Amsterdam turns

all this into sustainable mobility policies, regulations and incentives. In many cases consultancy firms assist project managers. Such a company shares insights on practical solutions around charging infrastructure and the success factors of the introduction of sustainable mobility.

Advanced Metropolitan Solutions

Within AMS science, education, government, business partners, and societal organizations are working closely together to create solutions for the complex challenges a metropolitan region like Amsterdam is facing. The institute will use test beds in Amsterdam to understand the flows and characteristics of the urban environment, and thus to design metropolitan solutions and accelerate their integration into real life. AMS is working on a range of topics related to the city, of which city mobility and air quality is one. We will learn about projects such as:

- A plant called 'Green Junkie' that eats air pollution
- Citizens that measure air pollution by using crowdsourced data
- Development of a route planning system that minimizes traffic time, noise, and air pollution.

After a general overview of this project portfolio, we focus on a project called the Urban Mobility Lab. The lab analyses multi-modal traffic flows – an extremely complex task in a metropolis like Amsterdam, given that transport and traffic are the result of millions of major and minor decisions. Understanding and predicting the dynamics of mobility begins and ends with data. By collecting and combining data from all different mobility systems and actors we can explore the complex relations between transport systems, activity patterns, and demographic and economic processes. In this data we aim to discover new insights with which we can predict, design, and support more sustainable transport solutions.



Clean air in the city of Amsterdam

Amsterdam wants clean air, now and in the future. This clear objective is an important ingredient in the city's mobility strategy, complemented by policy objectives related to traffic flows and safety. Part of the Air Quality Programme is the introduction of low-emission zones for freight, taxis, and touring cars. 'Amsterdam Electric' has transformed the capital of the Netherlands into one of the leading European cities for electric cars. Apart from stimulating privately-owned EV's, the goal of the programme is to make all public transport zero emission by the year 2025.

Speaker

David Gelauff is Head of the Air Quality Programme and process manager of wind energy of the Municipality of Amsterdam. He is responsible for achieving the goals of the programme and heading the Air Quality Programme team. The programme consists of a wide variety of projects and subsidies stimulating the use of cleaner vehicles, especially electric cars and other zero-emission vehicles. Gelauff is also responsible for the wind energy ambition of the city of Amsterdam: their goal is to have at (the very) least 12.000 extra households run on energy generated by wind in 2018.



David Gelauff

I amsterdam.



What do you need for a successful EV-strategy in a city? This will be the final question of this part of the day. Five pillars will play a role in answering these questions, these pillars are:

Infrastructure

Incentives

Awareness

Sharing knowledge

Economic opportunity's

Speaker

Roland Steinmetz is the owner and founder of EV-Consult. This is a company, focused on consultancy and project management for EV related projects. Steinmetz also develops EV implementation strategies for clients, and he analyses the role government organizations can take on in the development of electric mobility. Also the opportunities for businesses within the EV value chain are in the array of projects EV-Consult focusses on. Steinmetz gives advice about the charging infrastructure, economic developments, distributors from within the supply chain, communication, and the finances of electric mobility. Among his clients are the (local) governments, distributors from within the supply chain, utility companies, and other consultancy offices.



Roland Steinmetz



Programme day 1 // Thursday 10 March

10.00h – 11.00h Welcome and registration

11.00h – 11.30h Introduction course
Dr. ir. Martine van Veelen, course director, José Andringa, coach

11.30h - 12.00h The EU urban mobility strategy
Daniela Rosca, Head of Unit Clean Transport and Sustainable Urban Mobility DG Mobility and Transport, European Commission

12.00h – 13.00h Networking lunch

13.00h – 14.00h The Future of Mobility
Prof. dr. ir. Maarten Steinbuch, Prof. of Systems & Control, TU Eindhoven

14.00h – 16.00h Site visit: electric busses & solar field and direct electric charging of plains
Arno Veenema, manager Apron Planning & Control of Schiphol Airport

16.00h - 17.00h Tesla's mobility and energy chain strategy
Jelle Vastert, Head of EV Infrastructure Europe, Tesla

17.00h – 17.30h Break and snack

17.30h – 18.15h Project work participants
José Andringa, coach

18.15h – 19.00h Site visit: Tesla Taxi's

19.00h – 20.00h Travel to YES!Delft Incubator

20.00h – 20.30h Drinks & diner

20.30h – 21.15h Start-up pitches
Carice, E-trailer, Wabco

21.15h – 22.15h The car as a powerplant, future energy systems
Prof. dr. ir. Ad van Wijk, Prof. 'Future Energy Systems' TU Delft

Programme day 2 // Friday 11 March

08.45h – 09.45h Implement Future Mobility
Prof. Frank Rieck, Rotterdam University of Applied Sciences

09. 45h – 10.45h Vision on fuel mix
Els de Wit, Ministry of Infrastructure and Environment

10.45h – 11.30h CO2 emissions and city environmental zones
Arjan van Vliet, Department of Road Transport (RDW)

11.30h – 12.45h Tour RDM Campus & Lunch

12.45h – 13.45h Mobility and system design
Dr. ir. Maarten Bonnema, University of Twente and Norwegian Institute of Systems Engineering (NISE), Buskerud University College

13.45h – 14.45h Room for local initiatives and decentralized energy systems
Robin Berg, LomboXnet and Baerte de Brey, Stedin

14.45h - 15.00h Break

15.00h – 16.00h Project work participants
José Andringa, coach

16.00h – 18.00h Site visit Future Land APM Terminals Maasvlakte II. Clean freight transportation on from the sea reclaimed land.
Patrick van den Berg, Project Manager Equipment Maasvlakte II

19.00h – 21.30h Dinner

Programme day 3 // Saturday 12 March

09.00h – 09.20h Amsterdam Metropolitan Solutions (AMS)

09.20h – 10.00h AMS Urban Mobility Lab

10.00h – 11.00h Air Quality & Strategy
David Gelauff, Head of the Air Quality Programme of Amsterdam

11.00h – 12.00h Successful Mobility Policy in EU
Roland Steinmetz, owner and founder EV Consult

12.00h – 12.45h Lunch

12.45h – 13.30h Project work participants
José Andringa, coach

13.30h – 14.00h Closing Ceremony

Do you have questions about this course? Please contact:

Education Lead Climate-KIC and course director of the programme: Martine van Veelen.

As Education Lead of the Climate-KIC Martine van Veelen is responsible for the design and implementation of Master, PhD, and Professional education on the area of climate innovation & entrepreneurship at the Universities of Utrecht, Wageningen and Delft. As Managing Director of PhD Productions, she helps universities with the transfer of academic knowledge into value (valorization).

0031 6 246 86 741
martine.vanveelen@climate-kic.org



Programme developer Dutch-INCERT

Michiel Ytsma took the initiative for this Climate-KIC Cities Course on Sustainable Mobility and Air Quality, together with Martine van Veelen. He is contracted by Dutch-INCERT to develop the programme. Michiel is owner of Colca, creating innovation projects mainly related to mobility and agriculture. Therefore he involves people with the right expertise and takes the lead in the search for project funding by applying for a subsidy or by developing a business case.

0031 6 523 78 323
michiel.ytsma@d-incert.nl
www.colca.nl

