

CO-CREATING SUSTAINABLE CITIES

Learn how citizen's co-creation is key in making cities worldwide more sustainable

<https://www.edx.org/course/co-creating-sustainable-cities-delftx-wageningenx-ams-urb-2x>



Course Syllabus

Topic

Around the world, major challenges of our time such as population growth and climate change are being addressed in cities. Here, citizens play an important role amidst governments, companies, NGOs and researchers in creating social, technological and political innovations for achieving sustainability.

Citizens can be co-creators of sustainable cities when they engage in city politics or in the design of the urban environment and its technologies and infrastructure. In addition, citizens influence and are influenced by the technologies and systems that they use every day. Sustainability is thus a result of the interplay between technology, policy and people's daily lives. Understanding this interplay is essential for creating sustainable cities. In this MOOC, we zoom in on Amsterdam, Beijing, Ho Chi Minh City, Nairobi, Kampala and Suzhou as living labs for exploring the dynamics of co-creation for sustainable cities worldwide. We will address topics such as participative democracy and legitimacy, ICTs and big data, infrastructure and technology, and SMART technologies in daily life.

This global scope will be used to illustrate why specific forms of co-creation are preferred in specific urban contexts. Moreover, we will investigate and compare these cities on three themes that have a vast effect on city life:

- Water and waste
- Energy, air, food and mobility
- Green spaces and food

This MOOC will teach you about the dynamics of co-creation and the key principles of citizens interacting with service providing companies, technology and infrastructure developers, policy makers and researchers. You will gain an understanding of major types of co-creation and their interdependency with their socio-technical and political contexts. You will become equipped to indicate how you can use co-creation to develop innovative technologies, policy arrangements or social practices for a sustainable city in your own community. You will demonstrate this by developing an action plan, research proposal or project idea.

Basic knowledge of sustainability in urban settings, urban environmental technology and urban management is assumed.

This course forms a part of two educational programme of the Amsterdam Institute for Advanced Metropolitan Solutions (AMS) - AMS Vital and Circular city research themes. It is developed by Wageningen UR and TU Delft, two of the founding universities of AMS Institute, and in cooperation with Tsinghua University.

Learning Outcomes

In this MOOC, the following learning goals are defined.

1. Define the concept of co-creation and discuss typical examples of co-creation in the context of technological and policy innovations with regard to water, waste, energy, green and food.
 - a. Recognize different conceptual views on co-design and co-creation in different disciplines.
2. Explain that co-creation for sustainable cities is a multi-dimensional, vibrant concept.
 - a. Explain that co-creation requires collaboration between natural science, social science and engineering sciences.
 - b. Explain that co-creation takes place at the level of the household, street, neighbourhood, city and metropolitan region; these levels are interconnected.
 - c. Explain that with co-creation different types of value can be created for different stakeholders, depending on the co-creation activity and the role of the user.
 - d. Compare the various roles of stakeholders (considering their level of involvement, interest, influence) in co-creation;
 - e. Recognize that co-creation for sustainability is not a linear, but a systemic process.
3. Justify why a specific form of co-creation is preferred in a specific urban context, using arguments that relate to scale level, city politics and characteristics of the socio-technical system.
 - a. Describe different transition pathways towards becoming a more sustainable city in different regions of the world that have different agendas for urban environmental improvement: reform vs evolution and all gradients in between.
4. Draft a (research) proposal on how co-creation in a specific case study or own (research) environment can be used to develop innovative technologies or policy arrangements for a sustainable city.
 - a. Reflect on one's own potential role in the proposed research considering one's expertise and societal position;
 - b. Evaluate the pros and cons and added value of co-creation for a sustainable city.

Level & Prerequisites

The level of this course is advanced. The prerequisites are a bachelors/ undergraduate level on:

- Governance and environmental policy
- Urban resource management
- Urban environmental technology

Time Commitment

The course is an instructor led course and the 8 modules will be released in batches. The average of time spend on the course is 6-8 hours per module.

Course Calendar

Event	Date	Time*
Opening course - Module 0, 1 and 2	10 October 2017	0:00 UTC
Opening Module 3 and 4	24 October 2017	0:00 UTC
Opening Module 5 and 6	7 November 2017	0:00 UTC
Opening Module 7 and 8	21 November 2017	0:00 UTC
Verification upgrade deadline	7 December 2017	23:00 UTC
Due date submitting review assignment (module 8)	12 December 2017	23:00 UTC
Due date peer-reviewing assignment (module 8)		
Due date exams (modules 1 to 7)	21 December 2017	23:00 UTC
Closing course		

Grading Policy

To obtain a certificate for this MOOC, you need to pass 60% of all the tests and assignments.

In this MOOC, you will encounter a number of different assignments:

Module exams 40%

You are awarded the average score of 5 out of the 7 module exams. This makes up a total of 40% of your grade. This means 2 test scores (the lowest/ not completed) are dropped and do not count towards this 40%.

Graded assignments 20%

You will receive credits for 4 out of the 6 graded assignments. These four assignments make up a total of 20% of your grade. This means that 2 graded assignments can be dropped or do not need to be submitted.

Preparation for your proposal 10%

At different times throughout this MOOC there will be assignments where you work on a proposal. For the proposal assignments, you will use the team function. For every proposal assignment, you will post your contribution in your team and give feedback to others. The preparation for your proposal will count for a total of 10% of your final grade.

Peer review assignment: 30%

In module 8, you will finalize your proposal and review your own proposal in a self-review. You will also give feedback on the proposal other peers in a peer review. Peer review is a process in which students grade their peers' assignments or tests based on pre-defined criteria.

Academic Policy

We expect each student to complete the exams on their own, not in collaboration with other students. In addition, the submitted work in modules 3 and 5 should be your own work, not the result of collaboration with other students or written by someone else.

Discussion Forum Participation

As a student of this course you are part of a diverse learning community that is at the heart of a meaningful learning experience. The discussion forum is an essential part of this online course. In many assignments you are asked to discuss your findings on the forum with other learners. Moderators are participating in the forum to help in the learning community. Their role is to help facilitate an effective dialogue and support the forum guidelines. You will see comments from them in topic threads, and get messages directly from them if they have moved your post to a more appropriate thread.

There are a few things to consider when posting on the discussion forum:

- *Read before posting.* If you have a question, scan through to see if it's already been addressed and use the search function to avoid creating duplicate threads and find the most appropriate topic thread to post in.
- *Use informative titles.* Keep your post titles short and on-topic so the forums are easier to navigate. If you're asking a question, it should go in the title.
- *Make it easy to read.* Present facts and background in your post. Don't capitalize or bold entire sentences since this makes the forums harder to read. Check your posts for spelling or grammatical errors.
- *Stay on topic.* Don't change the topic of a thread or split a thread into multiple discussions. And please, don't post the same post/question in more than one forum.
- *Help keep the site friendly.* If you think a post or comment is mean, insulting, too violent, or otherwise inappropriate, click "Report" to let us know about it.