



Manifesto Circular education

the role
of education
in responsible
innovation

amsterdam
economic
board

Why

The youth own the future

– and through them we make the future brighter.

We introduce children and youth to the ideas behind the circular economy. The aim is to make it common knowledge, since within 20 years it will become the norm. We train in a multidisciplinary and problem-oriented way and work together with other programmes and institutions. We are the educators in the Amsterdam Metropolitan Area.

the urgency behind this manifesto



Towards a circular economy

We are on our way to a new circular society. It's a society in which the economic system centres on retaining and using products, and the resources and materials from which they are made, for as long as possible within the economic system – in short, on creating closed cycles. This contrasts with the current, linear 'take-make-waste' system, in which we throw away and destroy products at the end of their lives, and lose the raw materials. Globally, the economy is only 9.1% circular, according to a study by Circle Economy commissioned by the World Economic Forum. So, there's a lot of work to be done.

Now or never

Due to population growth and intensive consumption, we use nature 1.7 times faster than our planet's ecosystems can regenerate! This effectively means that by the summer each year, we've already used more than the earth can regenerate. This is not sustainable, and we will simply have to make more intelligent use of what is available to us. This is a responsibility we all share. Join in!

Power of education

Education is crucial for the transition to a circular economy, to prepare people for the society and labour market of tomorrow. In this transition, our pupils and students need to be taught both the behaviour/mindset and the skills (the intangible and the tangible) that are needed to live and work in a circular economy.

Together we make the Amsterdam Metropolitan Area. We make the future.

How

principles for circular education

Educational institutions undertake to make both short- and long-term plans with goals from the easily attainable to the ambitious. In addition, they declare that they will collaborate, and describe the nature of this collaboration. Walk the talk. They will do so according to the following principles:

D



Design for the future

Account for the systems perspective during the design process, to use the right materials, to design for appropriate lifetime and to design for extended future use.

I



Incorporate digital technology

Track and optimise resource use and strengthen connections between supply chain actors through digital, online platforms and technologies that provide insights.

S



Stretch the lifetime

While resources are in use, maintain, repair and upgrade them to maximise their lifetime and give them a second life through take-back strategies where applicable.

R



Rethink the business model

Consider opportunities to create greater value and align incentives through business models that build on the interaction between products and services.

U



Use waste as resource

Utilise waste streams as a source of secondary resources and recover waste for reuse and recycling.

P



Prioritise regenerative resources

Ensure that renewable, reusable, non-toxic resources are efficiently utilised as materials and energy.

T



Team up to create joint value

Work together throughout the supply chain, internally within organisations and with the public sector to increase transparency and create joint value.

What **the** commitment

By signing this manifesto, we express our commitment in the education sector (from primary school to university) to an agreement to include the concepts of the circular economy in the curriculum, to make the theme central to relevant education programmes, and to embed it in the mission and vision of institutions, guiding the students of today towards environmental awareness in their lifestyle, and educating them to become intelligent citizens and professionals who are able to cope with the complex problems of the future. We call on the entire education system to join us in doing so.

We also commit to the plans that accompany this document, which describe how each educational institution will implement this manifesto, structured according to the principles and different roles of education.

This manifest is signed by:

What

the action needed from the education sector

Each educational institution that is signatory to this manifesto enters into a commitment on the basis of the seven principles to make plans for innovation in the education system. This innovation will be apparent both in the roles played by education and in the approach to teaching:

Student orientated
From push to pull – talk back – challenge – take ideas with you – do it together

Bold
Let go of things that don't work – offer alternatives – take the lead – design the future – experiment

Broaden your horizon
Cooperate with industry – create a playground – move with/ahead of developments

Flexible
Step by step – experiment – test ideas – collaborate – multidisciplinary approach

Innovative
Lifelong development – learning communities – post-initial education – 21st-century skills



supported by:

Appendix

Why is the transition to a circular economy important for the Amsterdam Metropolitan Area?

The Amsterdam Metropolitan Area (AMA) is an economically strong region and has the ambition and responsibility to accelerate the transition to a circular economy. We see the closure of cycles – the circular economy – as an opportunity for the AMA which, in addition to the limitation of dependency on resources, will lead to:

- the development of knowledge, innovation and startups;
- the creation of new industry and employment;
- a reduction in pressure on the environment.

Smart solutions for saving resources

Our region is buzzing with circular activities: circular startups and scale-ups, a movement from ownership to sharing, circular sector development, smart design, etc. All these activities have the same goal: smart solutions for saving resources.

Ambition

By 2025, the Amsterdam Metropolitan Area aims to be a frontrunner in the field of smart solutions for the limited availability of resources, whereby valuable resources are no longer used, or are used more efficiently and for longer. The Amsterdam Economic Board works on the transition to the circular economy by working on systems innovation via public-private collaboration.

Points of focus

Since 2016, the Board has been working on a resources transition programme that supports the ambitions and goals for 2025. The programme focuses on facilitating cooperation between governments, business sector and knowledge institutions in the areas of:

- The redesign of products and their use;
- The high-quality valuation of 14 resource flows;
- Circular purchasing and tendering.

Education is crucial in this;
The youth own the future.