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GREEN CIRCULAR CITIES COALITION NEWSLETTER

IN THE LOOP

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Welcome to the Green Circular Cities Coalition's first newsletter.

Transiting towards the circular economy is indispensable to the sustainable and livable city. In August, the Green Circular Cities Coalition was officially launched with the endorsement from cities and knowledge partners acknowledging the importance of the circular transition.

To keep abreast with urban circular transitions, we proudly present the first newsletter of the Green Circular Cities Coalition, and hope you will enjoy exploring this topic with us through this newsletter.

Green Circular Cities Coalition
Managed by the ICLEI East Asia Secretariat

IN THIS ISSUE

6 Cities Step on Circular Journey

ICLEI's Green Circular Cities Coalition kicked off

Werde Cupster!

Bonn's coffee cup sharing program on the go

Phosphorus Recycling

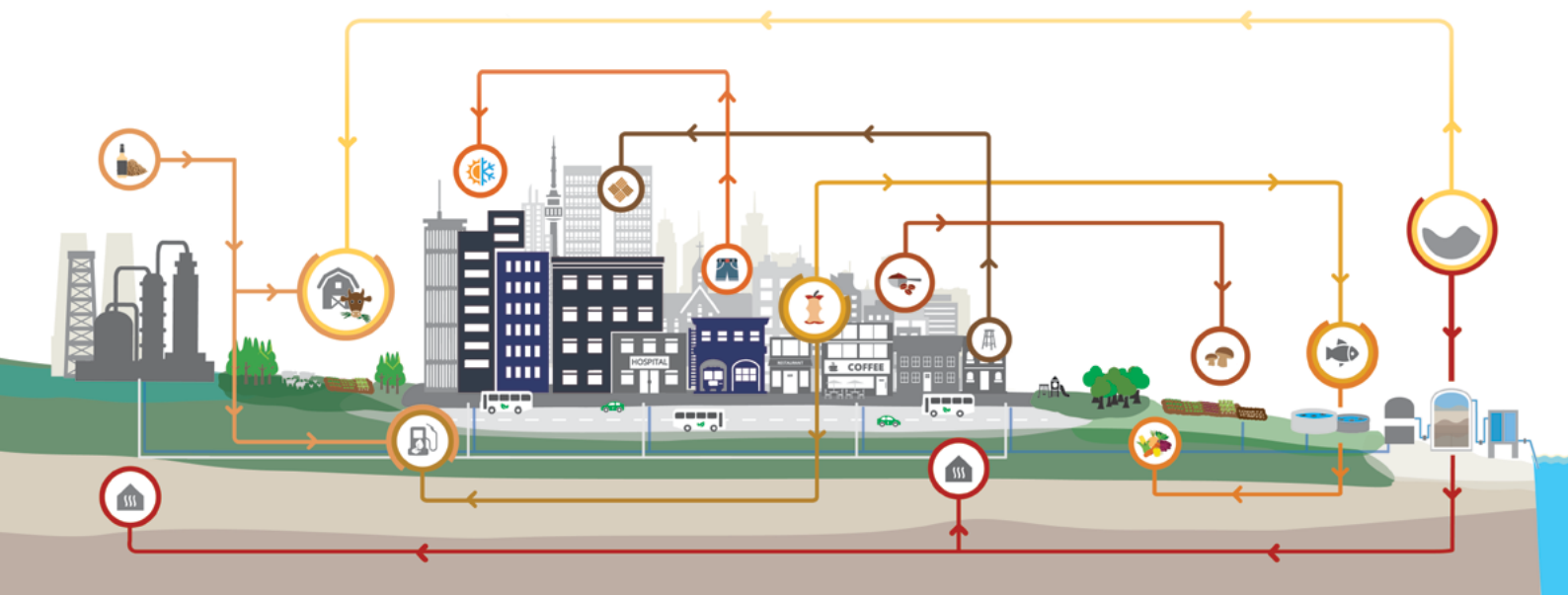
An option for my city and region?

Turku's Resource Wisdom Roadmap

ICLEI and Turku partner to design a regional resource wisdom roadmap in identifying priority areas for action

Does Circular Economy Create Jobs?

Learn about Belgium's experience in a latest report



FROM HERE, OUR CIRCULAR JOURNEY BEGINS

Cities account for 70% of global resources and are responsible for 50% of the world's waste generation. But with the circular economy approach, cities can end the linear take-make-dispose model, and move towards a more sustainable and livable environment, with improved quality of life for the people.

The transition towards the circular economy will not only contribute to protecting the ecosystem and mitigating climate change, it could also deliver benefits to the society. By promoting the use of recyclable, sharable and replenishing resources, ICLEI's circular development pathway is leading local governments around the world to regenerate their urban systems with the use of virgin materials minimized, products kept at their highest value throughout their lifespans, and waste limited by improved design.

To facilitate the local governments further strengthening their joint efforts in fostering transitions towards the circular future, and synergize with the Sustainable Development Goals, ICLEI officially launched the **Green Circular Cities Coalition** during the Shenzhen Low Carbon City Forum on 29 August, 2019, presenting a platform to connect cities, experts, businesses and relevant stakeholders to increase urban circularity via experiences exchange and mutual learning.



Photo / ICLEI East Asia



Photo / ICLEI East Asia

On this occasion, representatives from the 6 Coalition cities and 3 knowledge partners also had the first joint meeting to exchange their expectations on the platform, and set the agenda for future work. The meeting notes are available [here](#), and the work plan will be also be circulated once finalized.

MEET THE CITIES

Bonn, Germany, has set its target to achieve carbon-free by 2050, and considers the circular economy approach as a key measure to reaching the goal. Under the threat from plastic waste, Bonn places its efforts on awareness raising, and calls for other cities to join the movement.

Datong, China, is facing significant environmental threats from the by-products and waste resulted from coal mining and refinery. To tackle the situation, Datong has invested in several resources circulation industrial parks, aiming to efficiently turn waste into resources.

Turku, Finland, aims to achieve carbon neutrality by 2029, and wiser use of resources by 2040. Built on its asset of the chemical industry, Turku is fostering its circular practices and industrial symbiosis, and works closely with various actors within and around the city.

Changchun, China, as a city with industrial legacy, seeks to re-utilize its advantages in technologies into resources circulation industrial parks, and looks forward to explore advanced practices via the Coalition.

Nagano Prefecture, Japan, has been the prefecture with the least amount of municipal waste in the country for four consecutive years. The prefecture is now focusing on foodwaste reduction, phosphorus recovery, and sludge-to-energy recovery.

Yokohama, Japan, has set its goal to reach zero carbon by 2050. The city is focusing on tackling plastics and foodwaste, and strictly applies the Japanese concept of *Regional Circular and Ecological Sphere Balance* (or *Circularizing and Ecological Economy*) by cooperating with nearby cities in utilizing abundant renewable resources.

CIRCULAR ACTIONS IN CITIES

We love coffee. But because of this short-term pleasure, some 16 billion single-use coffee cups are binned every year, after serving drinkers for an average of 15 minutes.

To address the waste mountains of coffee cups, cities around the world have started campaigns to encourage reusable packaging.

The German city Bonn launched the “*Werde Cupster*” campaign this summer to encourage behavioral change among shops and consumers. Initiated by *Bonnorange*, the city’s waste management company, the campaign incentivizes consumers to bring reusable cups by providing direct discounts on the beverage; whereas local shops are encouraged to join nation-wide public deposit systems, such as *Cupforcup*, *LogiCUP*, and *RECUP*, which will allow consumers to borrow reusable cup directly from the coffee shops on a deposit of 1 euro, and later return to any participating shop nearby.

While some may think such campaigns can only be initiated by shop owners with strong environmental awareness, the Municipality of Bonn has, in fact, demonstrated its leadership in calling for this movement, as *Bonnorange*, the campaign’s initiator, is partially supervised and operated by the city.

In addition, recognizing consumers’ hesitation over hygienic matters, and local baristas’ worries about it being challenging to identify the source of contamination in case of foodborne illnesses, the Municipality has played a pivotal role in resolving the concerns, by enhancing the enforcement procedures on hygiene requirements, and instructing relevant works in the campaign.

In East Asia, it used to be common to see people chilling in cafés with single-use plastic cups in hands in the South Korean capital Seoul before August 2018. Following a directive introduced by Korea’s Ministry of Environment, which punishes shops for providing disposable cups to customers staying in, the use of plastic cups has been reduced



Photo / Bonner Rundschau

by 72% in the country within a year, according to a recent report.

Some may wonder why mentioning the Korean national action in this section, the truth is, without local governments’ implementation in the frontline, the movement may not have been as successful. In fact, this was not South Korea’s first attempt to reduce plastic cups. A similar regulation was already introduced back in 1994. Yet, with limited willingness and capacity to carry out inspections at the local level, the implementation was hindered.

This time, as the environmental threat of plastics continues to exacerbate, and China stopped importing waste, South Korean local governments are eagerly taking actions. In Seoul, for example, stricter inspections are carried out, with inspectors irregularly visiting cafés and beverage shops. Local shop owners are also cooperative, and many have voluntarily signed a joint agreement on providing direct discounts to consumers with reusable cups.

But cities can always do more. Today, many consumers in Seoul still enjoy taking a short break in cafés before hitting the road with a half-full cup. Yet, without reusable cup deposit systems, like the ones in Bonn, shops are usually left with no choice but providing single-use cups to the customers while risking fines. In this regard, it appears that there is still need for the city to enhance awareness among different consumer groups in taking actions.



Installation at the Seoul Upcycling Plaza. Photo / ICLEI East Asia

KNOWLEDGE BOOST

Phosphorus is a finite and non-renewable resource, yet also an essential element for global food security. With 53 million tons of phosphate fertilizers being used annually, it has been expected that the global commercial and affordable phosphorus reserves may be depleted in 50-100 years, posing a new challenge to the increasing food demands. Thus, future access and recycling of phosphorus has generated vibrant debate in Europe and Japan.

In particular, the wastewater sector has been identified to have enormous potential for secondary phosphorus and its recycling. New technologies have been developed to remove unwanted contaminants from sewage sludge and sewage sludge ash.

Recently, a [new study](#) by the LMU-University of Munich and the Ecole polytechnique fédérale de Lausanne investigated and compared how the technologies of recovering phosphorus in the form of struvite from sewage sludge, and in the form of phosphoric acid from sludge ash influence the spatial of infrastructure, material flows, and the socio-technical in Germany, and summarized that:

Struvite Approach		Phosphoric Acid Approach	
Products can be directly sold as fertilizer for agricultural use.	Features	Require large-scale industrial processing from local wastewater treatment plants to wider fertilizer industries in other countries.	
Create small-phosphorus cycles , and provide decentralized circular systems of wastewater and food.	Spatial Proximities	Induce industry-oriented and supra-national phosphorus flows , and encourage extensive multi-stakeholder value chain development.	
No massive landscape changes required, and can minimize public opposition .	Public Acceptance	Might require expansion of existing plants, and lead to potential public opposition .	
Connect urban centers and regional farmers, and rework local food supply and fertilization regime.	Implications	Better fit to the current agri-food regime and contribute to closing global food nutrient cycles.	

The result highlighted the fact that the impacts on spatial structures, landscapes, and city-hinterland proximity vary when different technological approaches are applied. Thus, policy-makers shall consider the inter-sectoral, scale-related and socio-technical implications, together with the overall local, regional, national, supranational, and international strategies when adopting phosphorus recycling. A set of assessment criteria for technologies—such as costs, material flow process, impacts on the geography of the value chain, and influenced actors—would be valuable for policy-makers to make informed decisions in pursuing circular development.



ICLEI CIRCULAR WORKS UPDATE

ICLEI and the Finnish City Turku kick-started a **partnership** to design a regional *Resource Wisdom Roadmap*, with the support of the Finnish Innovation Fund Sitra. ICLEI and Turku will draw from experiences at the local, regional and national level to identify priority areas for action and policy interventions that contribute to the triple objective of carbon neutrality, zero waste and a low ecological footprint. In addition, the City of Turku and the Finland Futures Research Centre have also released a joint **feasibility study** to determine the preconditions for building an active network of circular economy actors in the Turku region.

The ICLEI European Secretariat kicked off the **CityLoops** Project in October, aiming to provide a framework for tracking cities' progresses in closing the loop for urban material flows. The project brings together 6 European cities of different sizes and their belonged regions to prepare for scale-up plans, with multi-level governance and spatial impacts also taken into consideration. Under the project, a circular city scan methodology and indicators, as well as demonstration actions on construction/demolition waste will be implemented. A guidance on replication will also be produced as one of the project outputs.

PARTNERS NEWS

The circular economy can create job opportunities in cities, regions and countries, suggested by Circle Economy in its latest report *Circular Jobs in Belgium: A baseline analysis of employment in the circular economy Belgium*. The report presents the findings of a baseline measurement on employment in Belgium's circular economy as a starting point for future interpretation, and zooms into the country's three regions of Flanders, Wallonia, and the Brussels-Capital Region, to provide examples of different types of circular jobs.



SAVE THE DATES

Disclaimer: ICLEI has neither received any commission nor direct connection with the listed events.

EAST ASIA

20-22 October / Nanjing

China International Circular Economy Exhibition

As the world's largest platform for circular economy technologies, equipment, products and softwares, participants will be able to explore innovative circular tech-solutions for pursuing a zero-waste city. 🌐

EUROPE

19-21 November / Barcelona

Smart City Expo World Congress

The Congress will discuss the marriage of technology and the circular economy in cities, particularly considering the social inclusiveness and cultural perspective of the urban fabric. 🌐

5-6 December / Amsterdam

WasteBuild Conference and Exhibition

The Conference will refresh our perspectives towards buildings and constructions, such as utilizing existing buildings as materials banks, assessing the circularity of existing building stocks, and more. As the host city, Amsterdam will also share its actions for a circular built environment. 🌐

The Green Circular Cities Coalition is the first international city-focused platform to facilitate accelerating circular development in Europe and East Asia. Operated by the ICLEI East Asia Secretariat, with strong support from other ICLEI offices including the European Secretariat, and the Japan Office, the Coalition has received endorsement from 6 cities and a number of knowledge partners, including Circle Economy, the Ellen MacArthur Foundation, TORMA, etc.

The Coalition is open to any local and subnational governments, and partners committed to empowering and accelerating transitions towards a sustainable and circular future. For more information, please contact

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