



INCIEN

Mission & Vision Statement 2021-2025



**INSTITUT
CIRKULÁRNÍ
EKONOMIKY**

Problem Statement

Our economy is in a state of intertwined crises that are driven by strong preference of short-term over long-term choices, ego over eco, and individual over collective. These prevailing preferences are putting our society in a state of crisis. This is posing an unprecedented systemic risk to the resilience of societal and environmental systems.

While the coronavirus pandemic is the main focus of today and its importance should by no means be downplayed, other more long-term threats are in sight. Global average temperature of **our climate has already increased by 1°C** relative to pre-industrial levels¹. In 2015, the Paris Agreement set the maximum global average temperature ceiling at 2°C by 2050, however, some countries, including **the Czech Republic, have already transgressed this ceiling today** as a result of the more intense heating of inland countries². Our economy is also wasteful. In 2020, **only 9 % of the raw materials extracted were reused or recycled**³. This is an alarming figure, considering that up to **45 % of the global greenhouse gas emissions** (further referred as “GHGs”) are associated with the extraction, production, use and disposal of materials⁴. Moreover, production of crucial materials such as aluminum, cement or steel are projected to **increase two- to four-fold until the end of the century**⁵. The concept of **Circular Economy** (further referred as “CE”) - which aims at **effective utilization of resources** by slowing, closing, and narrowing energy and material loops - reacts to this and offers a **powerful way to shape our society** towards more climate neutral yet competitive economy⁶.

The Czech Republic is by no means an exception in the need for transformation towards a low carbon and circular economy. On the contrary, with emissions of 12.4 tonnes of CO₂-eq per capita, the **Czech Republic has the fourth most carbon intensive⁷ and the second most industrial economy⁸** in the European Union (EU). Globally, an average Czech citizen is emitting double the amount of GHGs. The Czech economy is also largely inefficient as **the utilization of secondary resources is less than 9 %⁹. More than 45 %¹⁰ of mixed waste is annually landfilled** amounting to more than 2.5 million tonnes of waste. Even more so, materials perceived as commonplace such as **sand, gravel or limestone are becoming scarce**. These economic system failures are barely recognized by the policy makers, which corresponds to the **lack of preventive measures** to secure availability of some of the **strategic resources** as well as to mitigate **climate change**.

¹ [IPCC Special Report - Global Warming 1.5 °C](#)

² [Fakta o Klimatu - An average annual temperature](#)

³ [Circle Economy - Circularity Gap Report](#)

⁴ [Ellen Macarthur Foundation - Climate Change Paper](#)

⁵ [Material Economics - the CE a powerful force for climate mitigation](#)

⁶ [UNFCCC - Circular Economy as crucial to achieve the Paris Agreement](#)

⁷ [Fakta o klimatu - Worldwide emissions](#)

⁸ [Kafkadesk - CEE amongst most industrialized countries](#)

⁹ [Ministry of Industry and Trade](#)

¹⁰ [EU Environment Agency](#)

The large industrial base of the Czech economy is supposedly posing a **hurdle to the transformation** to a more Circular Economy. This is manifested by the **political unwillingness for change**. During the coronavirus crisis, the Czech Minister of Industry and Trade, has stated¹¹ that: ‘We must stop thinking about the Green New Deal’ and a few weeks later he in fact reduced governmental support to renewable energy¹². Ironically, CE holds a massive promise for deep carbon cuts in the highly industrial economies. According to a study¹³, **more Circular Economy can cut foreseen 2050 emissions from heavy industry by 56% in the EU**. The concept of CE can therefore be a good leverage for the industrially based economies whilst allowing for creation of green jobs and stable incomes. Similar characteristics do not apply solely for the Czech Republic but for the Central and Eastern European (CEE) region as a whole which is generally more industrial and less prone to green transformation.

9 %

(The current economy is only 9 % circular)

The impact of **climate change** on the Czech ecosystem and on the economy is no longer a matter of a theory but of a **harsh reality**. For example, an expansion of the bark beetle population due to droughts have caused significant economic damages (**an estimated 20-25 millions m³ of damaged wood in 2019**) and the increase of beetle-damaged wood has been exponential over the past years (from 1 million m³ in 2014 to 5 million m³ in 2017), to the extent that **Czechia is rapidly losing its carbon sink**¹⁴. Soil quality is another major issue as **around 70 % is at risk of erosion** and **annually around 21 million tonnes of topsoil is lost** due to “linear” agricultural practices amounting to a financial loss equivalent to 4.2 billion Czech crowns¹⁵.

It is certain that the upcoming years will be decisive for the Czech economy and for the CEE region as a whole. Either the responsible actors will be (i) proactive and transform swiftly whilst including the environmental damages into its economic calculus, or the region will be mostly (ii) reactive to the EU legislation and to the global market changes, therefore potentially lagging in the upcoming economic transition which is inevitable.

The mission of the Institute of Circular Economy (INCIEN) is precisely to support the first, proactive option and oppose the latter.

¹¹ [Greentech media](#)

¹² [Czech News Agency - Support to photovoltaics](#)

¹³ [Material Economics - the CE a powerful force for climate mitigation](#)

¹⁴ [European Semester Country Reports: Czech Republic](#)

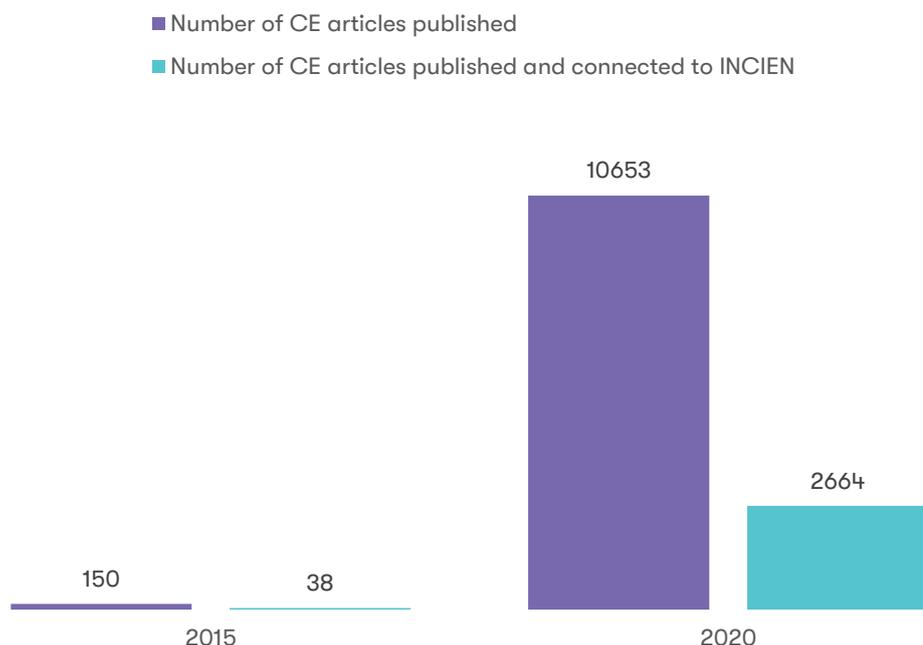
¹⁵ [Ministry of Agriculture - Annual report on soil quality](#)

Institute of Circular Economy (INCIEN)

Track record: 2015 - 2020

The track record of INCIEN spans over the last five years, in which it has been a clear leader in pushing the CE agenda in the Czech Republic and we have made a tangible impact in this respect. Our activities are primarily executed in the Czech Republic, however, we see an urgent need to connect to the European and global ecosystems. In 2016 a sister organization was set up in Slovakia (INCIEN-SK) in order to scale our impact. INCIEN-SK is now an independent organization in its activities, however, we frequently look for ways of collaboration.

We have been able to contribute to the **raised awareness of CE**, therefore activating local stakeholders. While there were **less than 150 articles** published on CE in 2015 in the Czech Republic, the interest in the concept grew exponentially. **Between 2015 and 2020, 10 653 articles¹⁶** were published in the online media as well as in print, TV coverages and radio broadcast. **Around 25 % of the references were directly connected to INCIEN as such.** INCIEN is also frequently invited to speak on TV, radio broadcast or for interviews. We also built a team of journalists and started a news website called “Zajimej.se”. **Zajimej.se has published close to two thousand articles on CE to this date.**



Our appearance in the media and the increasing focus on CE allowed us to be more active and heard in the public sphere. Since 2018 and jointly with the **Czech Ministry of Environment**, INCIEN has been involved in drafting the “**Circular Czechia 2040**” strategy with the main focus on Bioeconomy. Since

¹⁶ [Monitora - media monitoring and analyses](#)

2019, INCIEN has been a member of the **Climate Commission** organized under the Government Council of Research, Development and Innovation. At the **Ministry of Industry and Trade**, INCIEN is a member of the Working group on Utilizing Secondary Resources in accordance with CE practices. The **Smart City Council**, under the **Ministry of Regional Development**, is another platform where INCIEN participates.

With **CzechInvest**, the local Investment and Business Development agency, INCIEN is currently in the process of setting up a **“Circular Hotspot”** which will serve as a contact point on CE for local Small and Medium Sized Enterprises (SMEs) as well as for international organizations interested in Czech CE. INCIEN is also a member of the **Czech Business Council of Sustainable Development (CBCSD)**. Moreover, INCIEN is frequently organizing events, debates and seminars on CE. For example, in 2019 and jointly with the senators forming the opposition to the government, we’ve organized a **debate in the Parliament on the incoming EU legislation** on CE and on its implementation into local practices. Given the **lack of organizations similar to INCIEN**, our presence at these high-level meetings is, in our view, valuable and possibly essential to push the CE agenda forward.

While our activities in the public sphere give us the opportunity to shape the policies and legislation, **INCIEN is covering most of its associated personnel costs** by consulting private organisations on CE including SMEs, Industry associations or large corporations. Over the years, INCIEN collaborated with diverse entities including **IKEA, Skanska, Pilsner Urquell, Veolia, Nafigate Corporation, Association for the production of expanded polystyrene, Tetrapak, Mattoni** and many others. Since 2015, INCIEN has been in close collaboration with the company **JRK** on implementing more sustainable waste management practices in the Czech local regions. Together with **Mattoni**, one of the biggest producers of PET-bottled water, INCIEN ran a campaign on setting up a **deposit schemes for plastic bottles**. Mattoni is currently the frontrunner in pushing the idea of deposit scheme further.

With Nafigate Corporation, INCIEN worked closely on **utilizing used cooking oil** and **used coffee grounds** into alternative bio-based materials. One of the competences of INCIEN is to **connect diverse actors that would have otherwise not met nor collaborated**. This was proved when INCIEN was at the onset of a collaboration between a Czech company ERC-TECH and a multinational company Skanska on a project called Rebetong. This collaboration evolved into scaling up a technology on a large-scale recycling of concrete and construction waste. The technology is currently being piloted.

An important element of our work is **educating** the professionals as well as the younger generation. Jointly with the University of Chemistry and Technology Prague we’ve co-created and led **the first training programme on CE for professionals**. Since 2016 we’ve trained more than **120 professionals** mostly holding a senior position including representatives from large companies (VEOLIA, IKEA, SUEZ, Mattoni etc.), Small and Medium Sized enterprises (e.g. Lavaris, Stabilplastik) as well as participants from

the public sphere. This educational course proved to be a suitable platform for scaling our impact as many of the participants are currently implementing the CE principles into their organizations.

The annual conference ‘Odpad Zdrojem’ (**“Waste as a resource”**) organized by INCIEN, is another platform for knowledge exchange among the representatives from the municipalities and regions. In 2020, a fifth edition of the conference was organized and over the years **more than 3000 participants** have attended the conferences. In autumn 2020, INCIEN also held a conference called ‘Circular Economy its CEO’s agenda’ during which representatives from the large corporations met and presented their plans of implementing CE into their practices. Based on this experience, our aim is to scale-up our educational and awareness building activities and become the frontrunner in **“Circular Academy”**. We see this pillar as essential, **as 53 % of the Czech population are unaware of the meaning of the term “climate neutrality”**.

Large part of the material flows, and negative environmental impact is also concentrated in cities. This is why we’ve aimed at working with local municipalities where circularity can lead to substantial environmental improvements. Jointly with the Dutch consultancy Circle Economy, we’ve delivered a **Circular Scan for the City of Prague**¹⁷. To our knowledge, this is the first scan of its sort delivered in the CEE region. Outcomes of the scan are currently being used as an analytical report at the **Prague’s Working Group on CE**, where INCIEN is a member.

In Brno, the second biggest city in the Czech Republic, INCIEN participates at the **Commission For The Environment (Brno+)** on a long-term strategy for the city. In Brno, INCIEN was also at the onset of **testing and scaling the conversion of municipal wastewater sludge** into bio-based compressed natural gas (BioCNG) which is currently used as a sustainable fuel for local public transport. INCIEN was awarded the **E.On Energy Globe Award**¹⁸ for this initiative in 2019. While large cities are an important element of our work, our aim has always been to have an outreach into the local regions, too. Since 2015, we’ve been also involved in **improving waste management practices in more than 200 villages or small towns** and we made more than 50 physical waste analyses. Our aim for the future is to scale-up our impact at the regional and municipal levels and collaborate with these actors more intensively.

INCIEN is also one of the coordinators of the local **EIT Climate-KIC Hub** together with **Impact Hub Prague, Brno and Ostrava**. With Impact Hub, INCIEN is also collaborating on a second edition of the **acceleration programme** called Climate Challenge, which is dedicated to start-ups, scale-ups or organizations that tackle climate change.

While our impact over the past five years has, in our view, been tangible and well accepted, the majority of the work is yet to be done in order to make the Czech economy more circular and less carbon intensive.

¹⁷ <https://www.circle-economy.com/insights/circular-prague>

¹⁸ <https://www.energyglobe.cz/minule-rocniky/2019/biocng-pro-brno>

Institute of Circular Economy (INCIEN): Vision & Mission Statement 2021 - 2025

We foresee the upcoming decade as a **crucial period in the development of the Czech and CEE economy**. While the Western EU countries are rapidly investing into innovations and interventions towards a circular and climate neutral economy, the CEE countries are burdened by their conservative and short-term mindsets, prevalent corruption, large industrial base and therefore largely **unwilling to change**. The reluctance to change is likely to be detrimental on the long-term basis and **the local economies may become much less competitive and even in part obsolete**. This could lead to unprecedented impact on the climate and ecosystems as well as on the local communities and the whole society.

At **INCIEN we feel an urgent need to be vigilant in overseeing the course of our economy**. Our responsibility is to be active in the realm of public and private sphere and to shape the debate into a state where the “new normal” will be a society with limited impact on the local ecosystems whilst having a prospering and competitive economy.

The **vision of INCIEN** is a society in which human capital is nurtured, and natural capital is preserved or when needed then exploited, however, within the planetary boundaries.

The **mission of INCIEN** is **to be a catalyst for fostering both bottom-up and top-down transformation towards a circular economy (CE) as a way towards a carbon neutral and environmentally sustainable society**. The mission of INCIEN is to **connect** the right people and organizations, to **facilitate a dialogue** among the key players in the economy, to **inform** objectively about the up- and short-comings of CE, to **research** the potential of CE in the different sectors of the economy and finally to actively participate in the **systemic change** towards circular and low carbon economy.

We aim to build our vision and mission on the **four following pillars**:



INCIEN
AKADEMIE



INCIEN
RESEARCH &
CONSULTANCY



INCIEN
THINK-TANK



INCIEN
WATCHDOG

INCIEN aims to (i) **increase the awareness of CE in the local population and educate the local professionals (INCIEN Academy)**. This reacts to an obvious realization that a systemic transformation of the size ahead of us, will not be realistic if the larger public and the actors that hold the power are not activated. Our aim is therefore to boost our awareness building activities, incl. Circular Academy activities so that **by 2025, 80 % of the population knows what the concept of CE entails** and what the necessary steps are to make this concept a reality.

INCIEN aims to (ii) **consult and do research** for private and public bodies that seek our expertise in the respective sectors of the economy **(INCIEN Research & Consultancy)**.

INCIEN aims to be a (iii) **leading think tank on CE in the Czech Republic** and possibly in the CEE region **(INCIEN Think Tank)**. We foresee ourselves as the center of expertise and as an authority on Circular Economy. Our aim is to provide science-based analyses to the industries, public bodies and local public as a way towards making well substantiated decisions and policies.

INCIEN aims to be an (iv) **active watchdog** in terms of foreseeing the right course of CE. INCIEN needs to be heard and active in shaping the public policy by participating in various working groups, commissions, council, governmental or municipal hearings **(INCIEN Watchdog)**.

In order to make a tangible impact, the scope of our work needs to be manageable and realistic. For that reason, we've made a decision to focus on four (maximum five) sectors of the economy in the following working programmes (a) Textile, (b) Bioeconomy, (c) Plastics, (d) Circular Procurement (with an emphasized focus on the construction sector) (e*) Heavy Industry (possible fifth programme). These programmes were chosen based on pre-defined criteria including mass flows, expertise of INCIEN, public awareness and climate impact. For each of these programmes, specific targets, activities, partners and possible resources and sources of funding are being currently identified.

While the previous five years could be perceived as successful in terms of increasing the awareness of CE, in promoting the concept and in activating the local stakeholders, the following years will be crucial in terms of translating the concept into tangible, economical and scalable cases.

