Cluj-Napoca
Green.Digital.Resilient
Cluj-Napoca:
The economic profile of Cluj-Napoca - Evolution in time

**AGRICULTURAL ECONOMY**
- The fair city
- Family business
- Sales
- Crafts

**INDUSTRIAL ECONOMY**
- Industrial city
- Production
- Workshops
- Workers

**KNOWLEDGE BASED ECONOMY**
- The city as Ecosystem
- Co-creation
- Participation
- Digitalization
The economy of Cluj-Napoca has doubled in the last decade. Compared to the total workforce of the city, the share of programmers is 8.29% in Cluj, the highest in cities in Europe.

Three main coordinates for the Development of the city:

The **2014-2020 Development Strategy** was built on the basis of the extensive valorization of the existing expertise in the Cluj community. The success of the implementation is directly dependent on the existence of a permanent partnership between the local administration and the community.

The **Integrated Urban Development Strategy of the Municipality** and the Cluj-Napoca Metropolitan Area is the main strategic planning document for 2021-2030. The Vision agreed and assumed by all relevant actors in the local ecosystem (administration, academia, business, non-governmental environment and civil society, etc.)

The **Digital transformation strategy**: Cluj-Napoca will organically integrate technology into the life of the community, in order to increase the quality of life of the citizens. The digital transformation will use all available resources and will involve all relevant actors.
Support for Investors in Cluj-Napoca:
- excellence in services;
- support for innovation results in better quality of life for the community.

The priorities of the local administration:
- reduced rate for local taxes on the green buildings;
- maintaining the lowest level of local taxes allowed by the law;
- all of the incentives for the companies set in the industrial parks will be granted, according to the legal provisions;
- developing the road and business infrastructure;
- open minded public administration, citizens-oriented: supports innovation and digitalization in public sector (smart city);
- financial and systematic support for cultural, youth, social activities
Part of the commitment in the IUDS: Ensuring an environmentally friendly development of the municipality and its metropolitan area, so that greenhouse gas emissions are reduced by 10% by 2030, and the area of green spaces is increased by 15%.

GREEN DIMENSION OF THE CITY: 190 ha of new and expanded green spaces 100,000 trees planted in Cluj-Napoca by 2030
SUSTAINABLE URBAN MOBILITY

Metropolitan ring - includes bike track
Metropolitan train and Metro

Sustainable mobility corridors

- Northern corridor - next to the train station
- East-West corridor - 4 areas around the city

Green-Blue corridors

- Alongside Someș river connecting the metropolitan area
- All interventions involve public lighting modernizing with LED technology and increasing the number of trees on the street alignments.
European projects for green public transportation
100 million euros
The City Hall objective is that the entire city's public transport fleet to be electric by 2026.
SUSTAINABLE MOBILITY: POLICIES

GREEN FRIDAY - free public transport on Fridays

Dedicated public transport lanes

Shared space & walkable city concepts applied to all new projects
Inclusive community: dedicated transportation programs, School Buses Program, free public transportation for retirees, pupils and students.
Bike sharing system

Public policies: Expanding the network of bike lanes by creating coherent routes. Principles of action: continuity, connections between neighborhoods, connecting the center to neighborhoods.
Charging points for electric vehicles (cars, scooters and bicycles)
European projects prepared for 2021-2027 financial period related to green public transport.

- Purchase of autonomous buses (electric) and software development - in the public procurement phase
- Fuel cell buses (hydrogen) - Fuel Cell Electric Bus - 40 pieces and a hydrogen production station
- Electric buses, trolleybuses, extension of the trolleybus network and modernization of the tram depot

Preliminary estimate - value of over 120 million euros
WALKABLE CITY

„The city of 15 minutes walk”

Sopor Neighborhood - The first neighborhood in which you can access all of the important objectives: public transport stations, green spaces, schools, shops, etc. within a 15 minutes walk.
PUBLIC POLICIES FOR ENERGY EFFICIENCY

- Green buildings tax reduction
- **Strategic partnership** with the Technical University for energetic management
- Learning from good practices - participation in various European projects such as **REFLOW** (mitigating Greenhouse Gas emissions through energy poverty alleviation)
- **Energy efficiency component** for each new rehabilitation or extension of public building
- Green buildings for new education facilities

International recognition: **European Energy Service Award 2019**: Cluj-Napoca City Municipality - Technical University of Cluj-Napoca and the Center of Resources for Energy Efficiency and Climate Change for **Urban Energy Management Through Academic-Industry-Public Partnership**
Smart Buildings for Energy Efficiency

- **Energy Efficiency and Deep Renovation of Public Buildings**: public schools and kindergartens (12 projects completed in the last 4 years; 14 projects in different stages of implementation; 10 solution contests for schools in preparation)
- **Energy Efficiency and Deep Renovation of Public Buildings**: Clujana Municipal Hospital
- **Modernisation and digitalisation of the local power stations and heating networks**
- **Energy management of public buildings**
- **Promoting renewable energies**
  - 7 projects for installing photovoltaic panels on the municipality buildings
Smart Lighting for Smart Energy

- **LED Street lighting:** 20% of the public lighting system. Target by the end of 2030: 100%
- No mercury vapor lamps in the city
- **Smart LED Lightning** for 10 municipal buildings (public parkings and markets)
- **Intelligent street lighting control system** - Digitalization of public lightning network and lightning points
- Better practices for energy acquisition
- **Integrated projects:** modern infrastructure and public LED lighting
Blocks rehabilitated through European programmes:

Already finished:
52 blocks with 1,866 apartments

Work in progress:
47 blocks with 2,159 apartments

In preparation:
100 de blocks with over 4,000 apartments

**Objective:** All blocks in the city to be rehabilitated

Supporting the district heating system - any new construction is being built with district heating not with individual boilers.
Over 300 digital procedures in the relationship with the citizen

Digital City Hall

Supporting research, development and innovation:
From "Made in Cluj-Napoca"
To "Invented in Cluj-Napoca".

Development of local innovation ecosystems

Platforms and apps
{Blue ticket} & {E-account}

Virtual clerk Antonia (the first steps in the usage of artificial intelligence)

The city - laboratory for ideas of the future.
2022: Digital Transformation

- **E-account**: a digital storage for your documents
- **The Fund for Innovation and Experiment**: financing young entrepreneurs
- The development of the **local innovation ecosystem**
- **Competition for youth researchers**: science and engineering
- **GIS System**: automate emission of urbanism certificates.
- **Developing Antonia, the virtual clerk** (Anto-CIIC project): **Single sign-on etc.**
- All local taxes to be paid online
- All permits and notifications to be emitted online
- **Step-Hear** - mobile application in order to aid people with sight deficiencies

Cluj is on the first place in Romania in the digitalization of the administration.

1. According to a study conducted by Babeș Bolyai University: https://fspac.ubbcluj.ro/ro/evenimente/evaluarea-guvernarii-electrone-orasele-din-romania
DIGITAL SOLUTIONS: URBAN

- **Ticketing system** (61 machines)
- **Contactless payment by card in public transport** and card payment for parking; apps for payment of tickets and parking
- **100 solar powered** parking meters
- The entire public transport fleet was equipped with **GPS**

**Mobile apps:**
- **Tranzy** - display of arrival times of public transport
- **Cluj Bike** - self-service bicycle rental network
- **Cluj Parking** - for barrier car parks around the city
- **STEP Hear** - for people with visual impairments
- **CityParking Cluj** - free parking spaces - field sensors
Local participatory governance system

- Participatory budgeting: online.
- Participatory budgeting for youth: online.
- Advisory Board for Entrepreneurship and Innovation in IT.
- Center for Innovation and Civic Imagination.
Cluj-Napoca
European hub for digitalization & innovation

- The capital of clusters in Romania (Education, Agriculture, Furniture, IT, creative industries, etc.)
- **Startup City** - the number of startups has doubled in the last 10 years.

International profile events organized in Cluj-Napoca in recent years:
- Startup Europe Summit Innovation Camp, StartupCity Cluj-Napoca
- Runner-up City: **European Capital of Innovation in 2020 - iCapital**
- Innowave Summit 2022