European Capitals of **Innovation**

2016-2018

Places that bring ideas to life

#iCapitalAwards

EUROPEAN CAPITALS OF INNOVATION – 2016-2018 – Places that bring ideas to life

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FOREWORD

Prizes are a unique way to boost innovation. They bring together different people and ideas to solve set challenges. They unleash untapped resources, create the buzz that delivers solutions, and identify role models that can inspire others.

With the European Capital of Innovation Awards, we recognise European cities that are making a difference in urban innovation, improving the lives of their inhabitants. From sustainable mobility to circular economy, from co-creating with citizens to building the public spaces of our dreams, cities are living labs testing technological and societal innovation.

We reward cities that approach innovation in unique ways, making the most of their means. I am especially proud that our winners all have two essential ingredients in common: diversity and tolerance. Diversity – of people and ideas – fuels creativity. Without tolerance, diversity cannot thrive.

This booklet collects best practices of urban innovation from all corners of Europe and beyond. It shows that mayors and municipalities are key players when it comes to shaping the innovation of tomorrow. Every year we award €1.5 million to ensure the continuity and upscaling of such best practices. Let's keep innovating in our cities so they remain places that bring ideas to life and drive Europe forward.

Carlos Moedas,
Commissioner for Research, Science and Innovation

ABOUT THE PRIZE

The European Capital of Innovation Awards is an annual prize that recognises the European cities that best harness the results of innovation to improve the lives of their inhabitants.

In particular, the prize gives exposure to cities that:

⇢ contribute to open and dynamic innovation ecosystems;

⇢ involve citizens in governance and decision-making;

⇢ use innovation to improve the resilience and sustainability of their cities.

Each year, the winning city is named 'European Capital of Innovation' and receives EUR 1 000 000 to honour and raise its visibility as a role-model.

The 'runner-up' title gives recognition to the next best-performing cities. It comes with a EUR 100 000 prize to scale up existing innovation activities.

Finalist cities, acknowledged for their efforts in promoting innovation, are invited to join the European Capital of Innovation alumni network to share ideas, and exchange and replicate best practices.

Following a pilot edition in 2014 – which recognised the city of Barcelona, as well as Groningen and Grenoble – the award contest has been held annually since 2016, with all evaluations conducted by a jury of high-level experts in the field of urban innovation working independently of the European Commission.

The activities described in this book were suggested by the municipal innovation officers of the cities that have received awards since the full launch of the prize. They are some of the best examples of the work done by municipalities in the field of urban innovation, and illustrate the vibrant innovation ecosystems of today's most innovative European cities.

Umeå

Aarhus

Groningen

Hamburg

Amsterdam

Leuven

Paris

Grenoble

Torino

Toulouse

Barcelona

The iCapital Network

Tallinn

← EUROPEAN CAPITAL
OF INNOVATION

RUNNER-UP ⋯→

Athens

Tel Aviv

ATHENS

iCapital 2018

From doer to facilitator

Grass-roots renaissance

Athens was hit hard by the refugee and economic crises, leaving the city with severely reduced resources to meet immense social challenges. Grass-roots innovation has filled the gap, revitalising the city for the 21st century.

In 2010, the municipality of Athens faced major cuts in resources and greater pressure on public services. The city revamped its policymaking processes to innovate quickly so that, along with its citizens, it could revive the local economy, build up infrastructure and rebuild the residents' confidence in their city.

Cooperation with citizens and civil society was essential. The city made the most of its limited resources by directing training, infrastructure and funding to community, business and NGO-led initiatives. These helped to regenerate neighbourhoods, integrate refugees, improve education and digital access. The city now has new businesses, a more attractive urban environment, a revived cultural scene and better services.

Inclusion made the approach work. The innovation-support processes were accountable and transparent, while citizens were consulted on decisions throughout. The whole city could test ideas for positive change.

The municipality now brings groups together to improve the city rather than directing change from the top. That proves that innovation allows cities to do more with less.

"The city has changed from being a doer to being a facilitator and enabler to deal with fragmentation and improve cooperation."

Elena Papalabrou, Special advisor in civil society and social innovation, Municipality of Athens

38.96 km² – 664 000 inhabitants – www.cityofathens.gr

● ●

Polis[2]

Polis Squared invited citizens to co-create the city. There are two phases to the project. The first is a call for ideas from citizens, businesses and organisations to improve the quality of life and cooperation in neighbourhoods, streets and buildings. Successful initiatives receive small grants, advice and training to run their projects.

The second part concerns reviving closed shops in the centre of Athens, where many businesses had been abandoned after the financial crisis. Here, artists, creative industries and small enterprises have received free ground-floor space along three central main streets. In return, they hold events and educational workshops for the general public.

The project is empowering residents and businesses to improve the city's urban environment and sense of community. It is a win-win arrangement in which innovators receive support to try out new ideas, and in return they make the city more sustainable.

⇢ www.polis2.thisisathens.org/en

● ●

Curing the Limbo

This social integration programme enables refugees who have been granted asylum to interact with the citizens of Athens, learn about their neighbourhoods, cultivate job skills, and contribute to city life, while creating their own identity.

Funded by the EU as part of its Urban Innovative Actions initiative, the programme gives refugees the skills and social connections they need to leave the 'limbo' of inactivity they experience before receiving the right to stay.

Participants attend courses in Greek, English, creative skills such as media and photography, and ICT. They also receive affordable housing and follow professional job counselling tailored to their needs. Furthermore, refugees are integrated in city life through public events organised by local citizen groups. Activities are based on the requirements of each neighbourhood, defined by the local groups, and on the skills and needs of refugee participants.

⇢ curingthelimbo.gr/en

● ●

Kypseli Market

The Kypseli Municipal Market building dates back to 1935. Its impressive architecture is typical of Athenian modernism. Despite being threatened with redevelopment over the years, support from leading citizens in its neighbourhood protected it. Today, the building has been transformed into a collective space for community groups. Artists, social enterprises and citizen groups can use the building to set up innovative education and

cultural activities for local residents and visitors, supported by a viable business plan.

The new use of the space was selected after consultation with local residents and other stakeholders. Impact Hub Athens, a network of social entrepreneurs, manages the building, while the renovations have been financed from EU Cohesion Policy funds for Greece. In June 2018, the renovation took another step forward when tenants were selected to take on the eight previously empty shops within the market building, which now provides services and products for the community.

⇢ athens.impacthub.net/en/kypseli-munici-pal-market/

● ●

Athens Digital Council

Leaders of the largest digital and telecommunications companies in Greece and senior professors at major Greek universities have come together to encourage technological innovation in Athens government services and boost digital skills throughout the city. The Digital Council, under the coordination of the Chief Digital Officer, is helping the municipality to reach more people, become more transparent, efficient and effective in delivering services, and improve residents' chances of finding work.

Innovations from the Digital Council's work with the municipality include pilot waste-management systems and smart lighting in the city centre, among others. Thousands of residents can also access digital skills training from Digital Council members in Athens Open Schools and Start Project.

Athens municipality oversees the Council while the Athens Partnership, an independent non-profit organisation promoting high-level partnerships with the city, coordinates private-sector support. The collaboration aims to make Athens one of the world's leading digital cities and improve life for all Athenians.

⇢ http://athenspartnership.org/digital-council

SynAthina

SynAthina is a digital platform that brings together and supports citizen groups engaged in improving quality of life in the city. A City of Athens initiative, the platform was created in July 2013. By adding activities to it, organisers can generate publicity and connect with other groups, citizens and sponsors. A SynAthina kiosk in the city is also available for meetings, activities or information events, free of charge, 24 hours a day and 365 days a year.

This free-of-charge, open-access support for community initiatives empowers social innovation in the city. Through SynAthina, people can also share ideas with the local authorities on how to improve regulations or simplify government procedures. At the same time, by hosting information about grass-roots initiatives, the city has insights into residents' priorities and can spot activities that local governments could copy to improve local services.

⇢ www.synathina.gr/en

HAMBURG

Connect, collaborate and create

All on-board for the future

Hamburg is giving its residents the tools to take responsibility for their city's future with practical solutions such as digital participation systems and collaborative innovation parks.

This 800-year-old seaport is steaming into the 21st century and facing new societal problems with an openness to new ideas that has helped make it one of the 10 most liveable cities in the world. It is attracting the brightest and best minds in science, business and academia who are using data solutions and transparent public participation to find solutions for issues ranging from housing and urban mobility to accommodation for refugees.

"We seek to share our insights and contribute towards a healthy culture of innovation in Europe."

Sasha Jacobi, Project Manager Innovation, Hamburg

DIPAS

The Digital Integrated Participation System is a digital platform for residents of Hamburg to informally participate in developing products and services. With DIPAS, citizens, public and private institutions can access city information and contribute to shaping urban living spaces. This reinforces the city's status as a leader in developing new urban planning and construction processes.

The Ministry for Urban Development and Housing is cooperating with the HafenCity University and Agency for Geoinformatics and Survey to develop DIPAS.

⋯➤ www.hamburg.de/dipas/

DESY

The Deutsches Elektronen-Synchrotron is a national research centre and one of the world's leading particle accelerator centres. It builds research tools for scientists to use for applications ranging from exploring elementary particles to studying new nanomaterials. It is contributing to innovation by conducting basic research, which is the foundation for new knowledge and ideas. DESY allows firms to carry out product development and testing, while the spin-offs from its research contribute to improving medical technology, to better diagnose or treat diseases.

⋯➤ www.desy.de/

775.1 km² – 1.86 million – www.future.hamburg

LEUVEN

Collaboration at all city levels

Strength in small-city networks

Although small, Leuven hosts a diverse research population from one of Europe's most innovative universities, KU Leuven. Add in close engagement with residents and businesses, and the result is a highly creative, entrepreneurial and citizen-driven city.

Making the most of its unique demographic, Leuven tackles challenges through horizontal networks of public and private organisations that work together and pool resources. A key partner is the university, a major force behind efforts to make the city carbon-neutral. Now Leuven's network has expanded to include other iCapital finalists and winners.

"Putting together different people and perspectives to work on a shared issue stimulates new ways of thinking and leads to innovative and creative solutions to complex challenges."

Katrien Rycken, Coordinator Leuven 2030

Leuven MindGate

A network of local government, companies and researchers, Leuven MindGate promotes innovation in health, high-tech and creativity for economic development and prosperity in the region.

As well as promoting company creation, training and a hospitable environment for innovation, the network takes part in national and international projects, trade fairs and missions to promote its members and the city.

Notable MindGate projects include a one-stop shop for welcoming foreign specialist workers and the transformation of a run-down industrial neighbourhood into a flourishing art district.

···> www.leuvenmindgate.be

Leuven 2030

In this network, local government, researchers, businesses and citizens aim to dramatically reduce greenhouse gas emissions and accelerate the transition to a carbon-neutral Leuven. Alongside key stakeholders, it has produced a comprehensive and ambitious roadmap for the city, covering everything from sustainable mobility and building renovation to renewable energy and sustainable consumption.

Leuven 2030 also takes direct action by developing projects such as L.E.U.V.E.N. which is a partnership between more than 20 building managers to substantially increase the energy efficiency of their buildings.

···> www.leuven2030.be

56.63 km² – 100 300 inhabitants – https://www.leuven.be/

TOULOUSE

Toulouse, the open metropolis

Reach for the stars to grow

As the leading metropolitan area in France for start-ups, fuelled by a strong aerospace industry, Toulouse is experiencing a population boom. It is using social and technological innovation to develop in a sustainable way.

Innovations in public facilities and mobility, such as an urban cable car, enable Toulouse to enjoy an economy that attracts new inhabitants while protecting local quality of life.

To maintain its high-tech advantage, Toulouse is investing in digital skills, in particular in intelligent transport. Social cohesion and public-private projects are important, too, fostered through innovative communication with inhabitants.

"The award has created international recognition that adds value to our work and a rich, beneficial network with European partners."

Bertrand Serp, Vice-president of Toulouse Métropole in charge of Digital Economy and Robotics

Violette

People living in or visiting Toulouse can address questions to Violette, a virtual assistant available 24/7. Via an easy-to-use online messaging service on the city's website, Violette guides people to a wide range of practical information – on administrative services, transport, weather, air quality, leisure and cultural activities.

Violette is named after the violet, the flower of Toulouse. Following the chatbot's success, the city is increasing the range of services she can advise on, funded by the iCapital Award.

···▶ www.toulouse.fr

Toulouse Aerospace Innovation Campus

An attractive new quarter is being developed in the south of Toulouse. It provides a home for start-ups, research and other organisations focusing on the aeronautics, space industries and artificial intelligence. The campus will enable Toulouse to build on its strengths as a European leader in these sectors.

It also hosts 'La Machine', a street theatre company based around performance machines, promoting creativity and community spirit within the quarter's 'technology' theme. In 2018, the company's giant machines mobilised 900 000 people to take to the streets of Toulouse to enjoy a four-day festival.

···▶ http://toulouseaerospace.com

460 km² – 755 882 inhabitants – www.toulouse-metropole.fr

PARIS
iCapital 2017

Reinventing the city

By freeing up spaces for new uses and thinking beyond traditional ways of living, working and doing business, Paris is building a more inclusive, sustainable city ready to meet modern challenges.

Paris has fostered centuries of scientific, philosophical and artistic innovation, from Europe's 18th century Enlightenment to the Eiffel Tower. In recent years, boosted by a large concentration of students and higher educational institutions, this culture has created strong start-up and local activist communities.

To push this energy towards challenges such as climate change, land scarcity, migrant integration, transport and sustainable growth, the municipality and inhabitants are co-creating solutions.

Paris is releasing unused municipal spaces to innovators, building over 100 000 square metres of start-up incubators and financing citizen initiatives. Cooperation extends to involving inhabitants more in city management, for example in redesigning roads to increase pedestrian space. In addition, partnerships with other local governments and private companies are reviving neighbourhoods and developing 21st century work skills.

This 'Reinvent Paris' approach made the city both a runner-up in the 2016 iCapital Awards and a 2017 winner. The prize money has funded more innovation work, the 2018 conference for the FabCity network, and the TUMO school for free digital and creativity skills training for 12-18-year-olds. The municipality's success is inspiring a 'Reinventing Cities' initiative by the European Commission.

"If there is a new idea for a service, involve people to innovate fast and to make it work."

Carine Saloff-Coste, Director of Economic Development and Employment, Paris City Hall

105.4 km² – 2 140 500 inhabitants – https://www.paris.fr/

Paris Code/Paris Fabrik

These two initiatives by the Paris municipality are helping city residents to develop skills for growing industries.

Each year, Paris Code provides free training and a job guarantee for 1 300 people in response to a shortfall in IT professions. Training is provided by private suppliers, while IT businesses finance student training and support.

ParisFabrik focuses on training for the circular economy. Sectors include manufacturing, sustainable mobility, waste treatment, reduction in food waste, urban agriculture and sustainable buildings. Training providers, businesses and non-profit organisations propose courses which the city finances to develop skills for emerging industries.

Both programmes are aimed at first-time job-seekers and people looking for a career change, including those without professional qualifications. Paris Code also targets women, who are underrepresented in IT. Students can choose from various methods – MOOCs, classical learning and more hands-on approaches – to find the course best adapted to their situation.

⋯➜ https://bit.ly/2T991qX

Arc de l'innovation

The Eastern part of Paris is getting support for local innovation to promote and develop the area. The Paris municipality, other local governments in the region and private companies are behind this initiative.

A large area is covered – over 160 square kilometres, with 2.7 million inhabitants. This area is a hotbed of creative, digital and social enterprise. It houses most of Paris' incubators, co-working spaces and urban fab labs, along with numerous experiments such as micro farms or recycling initiatives.

Arc de l'Innovation is taking this enterprise up a notch. It promotes existing initiatives, organises networking meetings, provides online information about resources and finances projects with a local impact. Hundreds of initiatives are already on-board and feature on an online map.

Long-term, the project aims to attract new shops and services to the area, create jobs, make the area more attractive, and foster cooperation among the various local governments.

···▶ https://arcinnovation.fr/

Les Grands Voisins

When the Saint-Vincent-de-Paul hospital closed in 2012, it left 10 000 m² of buildings and an outdoor area of 3 500 m² empty in the centre of Paris. The building's owner, the municipality of Paris, allowed three non-profit organisations – Aurore, Plateau Urbain and Yes We Camp – to take temporary occupation of the site for social innovation.

The organisations have created temporary homes for vulnerable people such as ex-rough sleepers and foreign job-seekers, and an asylum-seekers' day centre. It is also a meeting place for the local people and work space for around a hundred small businesses, associations, craftspeople, artists and urban farmers.

Other parts of the site provide a well-being centre, cultural events and a social-enterprise restaurant, among other services.

Activities create opportunities for residents, business and the wider public to meet and promote social inclusion. The project, which originally ran from 2015 to 2017, has now been extended to 2020, before the site is developed for housing and local services.

···▶ https://lesgrandsvoisins.org/

PLACE

A collective of European educational, business and government organisations, PLACE helps refugees and migrants to become a source of innovation and economic growth. It hosts two-day workshops for migrants to develop products and services for problems that they face, matches innovators with networks and resources, fosters leadership skills and promotes collaboration across cultures.

The resulting projects are diverse, covering technology, health, integration, the environment, food and arts, and more. For example, one project is looking at interactive methods to teach children to be more eco-conscious; another is developing ways to share memories with distant relatives.

Men and women take part in similar numbers. Participants, who are typically aged from 21 to 55 and from a mixture of professional and skilled backgrounds, join activities as both innovators and trainers. Local civil society workers are also welcome.

PLACE is changing perceptions of migrants while generating value for the local society. The collective is currently being extended to other cities across Europe.

···> https://place.network/

Reinventing Paris/ Embellir Paris

These initiatives by the municipality of Paris are relaxing planning procedures to allow unused or unattractive municipal sites to be repurposed, in cooperation with innovators and future users.

Reinventing Paris, launched in 2014, released 23 sites for redevelopment, including a bus depot, an old swimming baths, an electricity substation, and empty plots. Following a call that attracted 372 proposals, sites are being transformed into housing, commercial and work spaces, with an accent on greening the cityscape. A second call has since been launched, this time to redevelop unused underground spaces.

Embellir Paris follows the same lines but on a smaller scale. Artists, collectives and associations have been invited to propose art projects for 20 of the city's more jaded streetscapes, with a city contribution of EUR 50 000 per site. The artworks will be installed by the end of summer 2019, when city residents can rediscover and enjoy previously neglected spaces.

···> http://www.reinventer.paris/en/sites/
···> http://www.embellir.paris/fr/reglement/

AARHUS
Runner-up 2017

A city for everyone, a sustainable city on the move

Social coherence with innovation

Aarhus is Denmark's second-largest and fastest-growing city. The municipality wants to maintain the city's social coherence while reducing its environmental footprint. Tech-savvy innovations are the solution.

Founded by the Vikings, this harbour city fosters inclusion and cooperation along with care for the environment, with help from a local volunteering culture. One municipality initiative is helping to integrate expats, international students and refugees. Other city actions have halved municipality CO_2 emissions over the last 10 years and promoted technology for greener mobility. Numerous 'test beds' provide spaces to research and experiment with the latest smart city technology, maintaining the innovation momentum.

"New, valuable innovation happens when different bodies and disciplines come together. There are great solutions for all types of projects."

Sebastian Bønding Rasmussen, Smart City consultant, City of Aarhus

TAPAS

The Testbed in Aarhus for Precision Positioning and Autonomous Systems (TAPAS) is a free test platform for a GPS system being developed to provide accurate, fast, real-time positioning, even for moving objects. The system is contributing to the city's innovation goals by enabling businesses, research institutions and public authorities to develop new areas of activity.

Its 1 cm^2 resolution makes it perfect for self-driving cars, drones and other smart city solutions, as technologies like these will depend on centimetre-level positioning.

The platform is funded by the Danish Agency for Data Supply and Efficiency.

⋯➔ https://bit.ly/2GgKV9z

IOT project on traffic and weather

A network of road sensors linked to GPS monitoring has been set up around Aarhus to protect drivers against winter weather and use salt-gritting resources more efficiently.

Data from the sensors and GPS monitoring is matched with official weather forecasts to predict which roads will be covered in snow and ice in the coming days. The municipality then limits its salt-gritting operations to only those roads.

This smart road-protection planning is also good for the environment as less salt seeps into the soil and fewer gritting journeys are needed, thereby reducing maintenance-vehicle emissions.

⋯➔ www.smartaarhus.eu

468.87 km^2 – 340 400 inhabitants – https://aarhus.dk/english/

The city where the future is now

Dreaming big in green tech

Tallinn is a true e-society, from robot parcel deliveries to worldwide digital connections. But it is also a green city, where cooperation unites communities.

Most services in Tallinn are paper free, thanks to municipal innovation, while tech start-ups are supported by incubators and investors from home and abroad.

Innovations for citizen well-being, low-carbon transport and the environment also create a healthy, happy society that nurtures ideas. The iCapital prize money supports some of these projects, as well as a Tallinn Technical University professorship to improve decisions on smart city topics.

X-Road

Built upon the existing e-Estonia system which provides e-services for the general public, X-Road is *inter alia* a cross-border network between Estonia and Finland that provides secure document information exchange.

The network was established early in 2018. It allows Estonia and Finland to connect their federal public and private information systems in a federated system of some 50 000 organisations, promoting cooperation and communication between the two countries. The network is now implemented in eight more countries, including Azerbaijan, Iceland and the Faroe Islands.

⋯➔ https://bit.ly/2CE7Ma4

"Tallinn dreams big and delivers. We use technology to solve problems wisely and share solutions with the international community."

Kristel Kibus, Leading Specialist, City of Tallinn

Sustainable City Gardening Network

In a fast-growing city, the Sustainable City Gardening Network helps citizens to protect green spaces for food production and community use, and is of particular value for the young, elderly and disabled.

City-mapping software helps residents to identify green spaces, such as around an old church. A public consultation in early 2017 between residents and the Tallinn Environmental Board resulted in 271 suggestions for 102 different existing and potential city gardens. Eight community gardens have since been built and the project has been expanded across the city.

⋯➔ http://gis.tallinn.ee/linnaaed/
⋯➔ https://bit.ly/2G8Dmk2

159.2 km^2 – 441 000 inhabitants – https://tallinn.ee/eng

TEL AVIV
Runner-up 2017

*Innovation and entrepreneurship
in a start-up city*

Tap into tech awareness

As a young city with limited natural resources, Tel Aviv built its economy through technological innovation and a willingness to take risks. Today, the city's residents are heavy tech adopters and have one of the highest rates of start-ups in the world.

The municipality taps into these strengths. Open information-sharing and collaboration between the municipality, residents and other stakeholders maintain the city's environment and high quality of life, while over 80 accelerators and four incubators foster further hi-tech innovation and entrepreneurship.

"Tel Aviv has a unique relationship between the municipality and residents. We encourage innovation to fix problems, expand services and collaborate with entrepreneurs."

Liora Shechter, CIO, Tel Aviv Municipality

DigiTel Resident Card

This digital tool searches up to 500 city services and cultural events a week to inform residents about activities that correspond to their possible needs. For example, young parents might receive notification of a local storytelling or a link to the opening of kindergarten registrations.

Registration for the card gives access to targeted notifications along with discounts for leisure facilities. Around 210 000 people have registered – about half the city population – and the numbers are growing.

···→ www.tel-aviv.gov.il/en/Live/ResidentsCard

CityZone

A collaboration between Tel Aviv university and the municipality, CityZone is an innovation park that hosts start-ups, multinationals, and policymakers and provides smart tech and mentorship to address city challenges.

Adjacent to a residential neighbourhood, the park is a living lab in which to develop, test and demonstrate new technologies for mobility, security, governance, the environment, education and communities before implementation throughout the city. It is also home to Tel Aviv's incubators and accelerators.

···→ www.city-zone.co

52 km² – 438 000 inhabitants – www.tel-aviv.gov.il

Trust in people leads to trust in new ideas

Innovation through trust and knowledge

Umeå's residents value progress and gender equality, resulting in a growing city that is attractive to women, men and children alike and prides itself on achieving innovation through diversity.

Located at the icy crossroads between north and south Sweden, regular contact with outsiders has taught Umeå to be open to strangers. This has created a culture of curiosity and trust. High education levels and strong public institutions, with a significant emphasis on cooperation with NGOs and including everyone in decision-making, ensures that people work together to maintain the city's good quality of life.

"The trust is inclusive. It extends to people outside the group. If you add knowledge, it fosters an innovative ability."

Anna Olofsson, Head of City Marketing

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Gendered landscape tour

Umeå's striving for gender equality has shaped the city and represents the work of the municipality, organisations and individuals. A guided bus tour includes landmarks, buildings and artworks, such as the neon sign 'nobody puts baby in a corner' on the façade of a local hotel, and the station tunnel. The tunnel was designed to be well-lit and broad to take into consideration women's safety concerns in public spaces.

···→ https://genderedlandscape.umea.se/in-english/

● ●

Frizon

Frizon, or Freezone, is a meeting place for girls and young women in a park in central Umeå. Teenage girls were asked to help the architects design it when it emerged that this demographic did not participate in public consultation on planning the park. The result is a covered area with circular swings designed for Swedish women of average height, 1.64 m. There are Bluetooth-enabled speakers and free WiFi access. The Swedish National Board of Housing, Building and Planning supported the initiative.

···→ https://bit.ly/2WWiB1U

2 317 km^2 – 125 080 inhabitants – www.umea.se

AMSTERDAM

Act small, fail fast, learn quickly and upskill

Collaborative spirit shows the way

Over the centuries, Amsterdam residents have learned to cooperate against the threat of floods in their coastal city. They have created a society that relies on creativity and collaboration, based on openness, innovation and pragmatism.

Bottom-up creativity and inclusion still influence the city today, fuelled by free access to data and space to test ideas. This is helping the city to face pressures from tourism, migration and changing job markets as well as more traditional challenges such as maintaining the environment, moving around a crowded city and addressing social inequalities.

Modern collaboration on solutions takes many forms. iCapital prize money has also been used to finance a call for local innovation, resulting into 37 projects. And despite Amsterdam's small size, it houses several partnerships and urban platforms where businesses, researchers and citizens can co-develop ideas and learn new skills.

A global presence adds to the mix. AMS-IX – Europe's largest internet exchange point – and Schiphol Airport connect innovators to people around the world.

Meanwhile, at the heart of Amsterdam innovation is an open, innovation-friendly spirit. If municipality staff or city inhabitants see something that needs fixing, they are challenged to develop their own solution directly, and either try again or collaborate with others to build on their success.

"The award had a strong impact on the city. It has put innovation on the political agenda."

Gerard den Boer, Manager (EU) Grants and Incentives at the City of Amsterdam

219.32 km² – 854 000 inhabitants – https://www.amsterdam.nl/en

DECODE

In a world with an increasingly centralised internet, the DECODE project provides IT tools that enable users to decide whether to keep their personal information private or share it for the public good. The aim is to address concerns about loss of control over personal information and its use by internet companies for profit.

DECODE brings together researchers from 14 research and government organisations in Europe, including Amsterdam and Barcelona municipalities. It is funded by the EU under its Horizon 2020 research programme.

The project team is creating, testing and demonstrating a distributed open architecture for managing personal and other data online, where users can choose who can access their information.

Four European pilot studies – one in Amsterdam – will investigate the societal value of giving individuals the power to take control of their personal data while allowing innovators to build apps and services that respond to individual needs and those of the wider community.

⋯➔ https://decodeproject.eu/

Amsterdammers, Maak je Stad!

EUR 600 000 of Amsterdam's iCapital Award was used to fund local, bottom-up innovations in Amsterdammers, Maak je Stad! This accelerator programme helps citizens and social entrepreneurs to improve the city's liveability. Of the 475 projects applying for funds, 37 were winners, chosen for their inclusivity and innovativeness by leading Amsterdam citizens.

Although initiatives covered many areas, the accelerator focused on projects for health and skills. For example, Smart Bricks has created a technology people can use to measure environmental issues such as air quality, while MON€Y SCHOOL teaches children how to manage money.

As well as finance, project leaders are offered workshops and training over six months and access to a network of experts from the City of Amsterdam, the Amsterdam Economic Board and Amsterdam Smart City, which support the project along with Kennisland, Pakhuis de Zwijger, Waag Society and the Amsterdam Institute for Advanced Metropolitan Solutions.

⋯➔ https://maakjestad.amsterdam/

Freezones

In these areas, people can use public space without licences or permission to make stagnant areas more attractive and livelier. For example, a shop can place a planter outside, hand out products to the public or advertise outside its building without having to ask the municipality first.

This limited reduction in regulatory obstacles encourages social and business innovation, especially by small organisations. In addition, events are allowed without permits but within a few rules to avoid nuisance to local residents. The main rules are that there can be a maximum of eight food trucks, stalls or other mobile outlets in the area which must be in addition to the business' existing offer.

The first two freezones were in Jan Evertsenstraat and Rijnstraat, residential and business areas to the south of the historic city centre. A third has been established at Osdorpplein towards the western edge of Amsterdam.

⋯➔ https://www.amsterdam.nl/ondernemen/ freezone/

Startup in Residence

Founded in 2015, the Startup in Residence programme connects start-ups and scale-ups with key social challenges in Amsterdam. Both Dutch and international entrepreneurs are invited to find solutions in collaboration with the local government, benefiting the city as well as its citizens.

Among Startup alumni are the Great Bubble Barrier, which keeps plastic in Amsterdam canals out of the sea, and Koppl, an online platform enabling people to request local help in times of need.

Start-ups accepted into the programme follow a six-month course on business, legal and financial topics. In addition, there is a series of workshops on how the City of Amsterdam works, for example when it makes decisions and procures services, along with the support of professional coaches or mentors. Working space and access to the municipality's network is also provided.

Once ready, a start-up can launch a solution independently or ask the City of Amsterdam to become an investor or launching customer.

···→ https://startupinresidence.com

Resilio

Smart green roofs with enhanced water retention will be installed on 10 000 m^2 of social housing complexes in Amsterdam in the Resilio project. The innovative structures reduce impacts from climate change on residents and neighbourhoods, including flooding from higher rainfall, higher temperatures and more droughts.

The roofs store excess water under a green plant layer to reduce chances of damage to houses and their surroundings. In hot weather, this water layer enhances the green layer's cooling effect. A smart control in each roof anticipates heavy rain or drought, releasing or retaining water accordingly, while a network enables remote water regulation. Resilio is developing an innovative smart grid that will manage water levels dynamically, to increase the system's efficiency.

Resilio, funded by a grant from the EU's Urban Innovative Actions initiative, shows how innovation can go hand in hand with social and environmental justice.

···→ https://www.uia-initiative.eu/en/uia-cities/
    amsterdam

TORINO

City lab for change

Opening up a smarter society

Turin prides itself on its openness, with a young population eager to test ideas. The municipality combines technical and social innovation to create opportunities for all.

Public and private innovation-led organisations are flocking to Turin, drawn by its flourishing ecosystem as well as city test lab facilities – Torino City Lab – upgraded using the iCapital prize money.

For wider innovation across society, the municipality is adding in affordable open labs, funding, public-private partnership, and advice to foster start-ups, while empowering citizens to make their city an attractive and inspiring place to live.

"We have to be attractive to potential innovation. This creates jobs, new technology, new business and new social services."

Gianfranco Presutti, Director of Innovation and EU Funds Department

Torino Social Impact

Social entrepreneurship is flourishing in Turin, thanks to an innovation strategy that includes Torino Social Impact online platform. This open ecosystem brings together over 50 companies, non-profits, and public and private institutions active in developing high-tech solutions for social needs.

Hundreds of citizens use the platform to find project partners, combining services such as technical expertise, impact investment, office space and coaching.

By providing this hub to help people make connections and access resources, the city is raising its profile as an attractive place for talent and investments.

┈┈▶ www.torinosocialimpact.it

Co-City

The Co-City project is reducing social exclusion in Turin by empowering people to transform their neighbourhoods and fostering innovation in some of the city's poorest areas.

Residents agree 'collaboration pacts' with local authorities that set out how abandoned buildings and spaces can be regenerated for public use. New social enterprises are being created, providing job opportunities in areas of relatively high unemployment.

Co-City is an Urban Innovative Action funded by the European Regional Development Fund.

┈┈▶ www.uia-initiative.eu/en/uia-cities/turin

130.17 km² – 878 074 inhabitants – www.comune.torino.it

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The annual European Capital of Innovation Awards recognise European cities that have best harnessed innovation to improve life for their inhabitants.

Funded under Horizon 2020, the EU's research and innovation programme, and chosen by an independent expert jury, the Awards reward inspiring innovation approaches that address every aspect of city life – from technology, business and mobility through to social cohesion, the environment and sustainability.

This booklet provides an overview of some of the unique solutions from the 2016–2018 Award winners and runners-up. It also shows how some have used their prize money to take innovation to new levels, as part of a Europe-wide network of iCapital cities.

All cities can learn from these finalists, and be inspired to take their own innovation to new heights as a potential #iCapitalAwards city.

Research and Innovation policy

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