

10 Climate Challenges & Plenty of Solutions

Check out the winners!

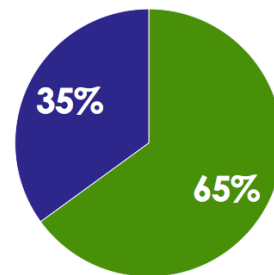
All candidates were encouraged to design zero-carbon, sustainable and resilient projects by responding to 10 climate challenges.

>>> Preliminary challenge: Carbon Ambition

The overarching goal to be addressed by the Reinventing Cities competition teams is the *Carbon ambition*.

The primary objective of the competition is to demonstrate zero-carbon solutions for building-construction, use and end-of-life. Cities currently contribute to over 70% of global greenhouse gas emissions. It is therefore particularly important for urban regeneration projects to consider greenhouse gas emissions. "Carbon ambition" is addressed through many of the other challenges such as low-carbon energy solutions, low-carbon materials and low-carbon mobility choices. Circular economy solutions covering the whole life cycle of the project address some of these challenges in a holistic approach. The Reinventing Cities winners guarantee the ambition of their climate change mitigation strategies thanks to emissions reduction goals.

Carbon neutrality goal & reduction targets: **65%** of the winners aim for net zero emissions and **35%** for over 50% emission reduction targets



Solutions from the winning teams:

- **Energy solutions:** low-carbon energy generation, energy storage and waste to energy principles (see Challenge 1).
- **Material solutions:** wood and Cross Laminated Timber (CLT) constructions, recycled materials and circular economy solutions (See Challenge 2).
- **Mobility solutions:** electric vehicles, walking and cycling infrastructure and lean transport incentives for logistics by encouraging local sourcing of products and services (See Challenge 3).

Specifically:

- ★ The project **L'Innesto**, for the Scalo Greco site of Milan, has a very interesting solution concerning its own carbon ambition. L'Innesto intends to "neutralize" its residual emissions by creating a newly built extension to the low-carbon district heating network for the building and the neighborhood. In this sense, the project will offset its carbon footprint by lowering the carbon footprint for heat energy for other energy uses in the neighborhood. Thanks to this low-carbon heating system, the project benefits the whole community. The overall lowered carbon footprint refers to emissions that will be "avoided" in the future.
- ★ In Reykjavik, the **Lifandi Landslag** project for the Artùn site has an innovative carbon ambition. More specifically, this project intends to lower the carbon footprint of the project during the construction phase. Emissions related to standard construction are quite high as diesel powered machines and vehicles are used to build the structure and transport materials. For Lifandi Landslag, the construction machine engines are to be powered by electricity instead of diesel. As the Icelandic electricity mix is low-carbon already (geothermal energy sources), the project will enable a reduced carbon footprint during its construction phase compared to a Business-As-Usual project.

>>> Challenge 1: Site energy efficiency and supply of clean energy

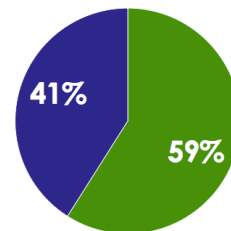
The first official sectoral challenge to be addressed by the candidates is "Site energy efficiency and supply of clean energy".

The proposed development should go beyond current "Business-As-Usual" energy standards to demonstrate exemplary energy efficiency, clean energy usage and strive to achieve a 'zero carbon' or 'carbon positive' status. The energy strategy developed by the bidder teams include passive design solutions, energy efficiency solutions, monitoring and evaluation of energy consumption, production and consumption of renewable energy and energy storage.

Energy efficiency is the highest priority in the design and operation of the buildings and public spaces. This means minimizing the amount of energy a building uses for heating, cooling, hot water, lighting, ventilation and electrical services. Fostering the production and use of clean energy at the site is also key.

The objective of this challenge is for candidates to prove how their energy solutions also contribute to lowering the carbon footprint of their project.

Net zero energy: 59% of winners aim to produce more or as much energy as they consume



Photovoltaic surface: winners aim to install 25 000 sqm of solar panels



Solutions from the winning teams:

- **Passive design:** insulation, solar orientation, solar protection covers, natural ventilations design.
- **Energy efficiency:** low-energy demand appliances for heating, cooling, hot water, lighting and ventilation.
- **Low-carbon production:** solar photovoltaic or solar thermal, geothermal sources, waste to energy facilities, grey water to energy facilities, Power Purchase Agreements.
- **Energy storage:** seasonal underground storage, Lithium-ion batteries, Zinc-air batteries, fuel-cells.

Specifically:

- ★ The **Garfield Green** project located in Chicago presents a particularly interesting and innovative solution for low-carbon energy generation. Instead of using Renewable Electricity Certificates (RECs), which allow you to remain connected to the grid and contribute to renewable generation somewhere unknown, "Garfield Green" has opted for a Solar Power Purchase Agreement. This approach guarantees that the electricity used is indeed renewable electricity that has just been produced on a nearby known site. For Chicago this contract ensures a sustainable electricity supply for when on-site photovoltaic panels are not sufficient to meet the actual demand.
- ★ The **Urban Battery** project in Madrid has an outstanding innovative concept for energy. Its focus is on energy storage. The project aims to build a 4.0 battery plant, disconnected from the grid by developing a combination of battery storage and solar energy. It seeks to develop cutting-edge technologies including biodegradable zinc-air batteries destined for future urban challenges, such as electric mobility. It will create an innovation laboratory, the BatteryLab, and a R&D space to raise awareness on energy storage and clean energies.
- ★ In Oslo, the **Urban Village** project is designed to produce more energy than it consumes by reducing to a maximum its energy consumption: it is energy positive. The energy production is provided by a large surface of photovoltaic panels on the façades and rooftops, as well as with heat pumps.

>>> Challenge 2: Sustainable materials, circular economy & waste

The second challenge included in the Reinventing Cities competition is "Sustainable materials management, circular economy and waste".

Candidates respond to this challenge by proposing low-carbon materials and material management at every stage of the project, including the design, tender, construction and the future management of the site. The objective is to reduce greenhouse gas emissions through resource and waste management, while providing co-benefits such as reduction in scarce resources extraction and fossil fuel consumption. This challenge encourages teams to use a Life Cycle Analysis (LCA) approach when determining which low-carbon construction materials to use, how to acquire local materials and how to design the project in order to reuse and recycle as much as possible.



Sustainable materials: 50% of winners use a majority of wood for their building structure and 50% use recycled materials

Sustainable certifications: 82% of winning projects are certified buildings by BREEAM/LEED/HQE or other national programs

Solutions from the winning teams:

- **Material type:** wood instead of concrete or cement structures, recycled steel and low-carbon insulation materials such as glass wool instead of polystyrene.
- **Material origin:** locally sourced recycled demolition materials to be reintegrated into the new building.
- **Waste management:** compost areas for organic waste, recycling facilities on site, waste to energy systems.

Specifically:

- ★ In Oslo, the project **Urban Village** at Furuset achieves carbon neutrality for construction thanks to the use of Cross Laminated Timber (CLT) for the structure of the building. CLT is a very low-carbon material and can even store carbon unlike cement and concrete. In addition to low carbon materials, the project aims to reduce material needs to a minimum (e.g. absence of a basement and compact building blocks) and by sourcing materials locally.
- ★ In Paris, in the Odyssee Pleyel project, the new-build share of the construction will be entirely of wood and therefore store carbon from within. Excavated soil from the Grand Paris transport project will also be reused and integrated within the construction process.
- ★ In Oslo, the Fossumdumpa site finalist **Recipe for Future Living** offers another approach to sustainable materials other than wood. This project offers an innovative full scale reuse of waste materials from local demolition sites in order to construct the building. This allows a 90% emissions reduction. The design of the building is such that concrete, glass and steel can be directly taken from the old site and set-up for a new building.
- ★ In Reykjavik, the project **Fabric** has a leading waste management solution. It aims to divert 95% of construction waste from landfill. If it is possible, demolition waste will be reused on-site or for other projects in the city.
- ★ For the Artun site of Reykjavik, **Lifandi Landslag**, in addition to be the largest wooden building in Iceland, integrates environmental sustainability into the interior design of the building. Frugality is at the heart of the eco-design: the absence of any extra ornamentation makes the building clean and modern while saving resources. The modular design ensures the building is able to change and evolve as the needs of the tenants grow or change.

>>> Challenge 3: Low-carbon mobility

In this competition, another way to reduce a project's carbon footprint is by responding to the third challenge: "Low-carbon mobility".

This challenge includes solutions by candidates that facilitate and encourage walking, cycling, public transport, shared vehicles and low-emission vehicles, such as electric vehicles. All propositions that de-incentivize the use of fossil fuel transport, such as limits to fossil-fuel car parking spaces are also included in this challenge.

This third challenge has encouraged candidates to go beyond a 'business-as-usual' approach in order to demonstrate exemplary standards of green mobility by reducing energy consumption related to transport as well as by contributing to improved air quality standards.

Electric mobility: 88% of winning teams intend to integrate electric vehicles



Solutions from the winning teams:

- **Low-carbon transport incentives:** walking and cycling infrastructure, links to public transport networks, electric vehicles, rest areas, shade, drinking water areas.
- **Carbon intensive transport limits:** reduction of parking options and spaces, speed restrictions, financial support for alternative transport routes, route optimization.

Specifically:

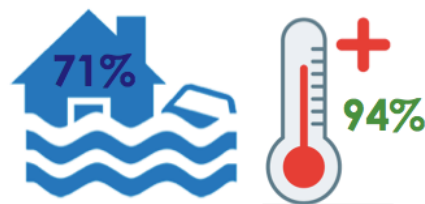
- ★ In Paris, the project **MKNO** centers its environmental focus around eco-mobility thanks to a vehicle electrification demonstrator. The centerpiece of this project is a 1000 m2 mobility incubator or "Garage Bleu". In addition, 20 shared bikes and 15 cargo bikes are made available to residents as well as car sharing possibilities. As the site is along a canal, river transport is to be implemented. Finally, even for deliveries, the project intends to remain low-carbon and offer sustainable e-delivery services.
- ★ In the design phase of **L'Innesto** project in Milan, a distinction has been made between systematic and non-systematic mobility needs. Innesto makes sure that systematic daily journeys, like going to work, can be made using an active mode of transport such as walking or cycling. For the more extraordinary travels, like going to see a doctor, the project intends to put in place a low-carbon fleet of vehicles for neighborhood residents.

>>> Challenge 4: Climate resilience and adaptation

As well as the objective of being low-carbon, the Reinventing Cities competition also seeks to be resilient with regards to consequences and impacts of climate hazards, the fourth challenge is " Resilience and adaptation".

Candidates were encouraged to perform a climate risk assessment specific to their site location in order to identify which climate hazards to mitigate. In cities, one of the most important physical climate risks is related to the rise in temperature resulting in the urban heat-island effect. In heavily urbanized cities the increase in average temperatures is exacerbated by urban mineral infrastructure. Candidates were encouraged to dedicate a significant surface of their project to green space. Other climate risks include strong winds, storms, flooding and droughts. Sites near coastal areas had to take into account possible sea level rise. Candidates have proposed solutions for adaptation measures specific to the climate change of their city.

Climate hazards: 94% of winners have an adaptation strategy against the risk of temperature rise & heatwaves and 71% against the risk of flooding



Solutions from the winning teams:

- **Resilient design:** solar orientation, natural cooling systems, adaptation to wind speeds, raised spaces in case of flooding risks, natural disaster / crisis mechanisms, greenery for lowering temperatures, solar reflection capacity of façades and roofs.
- **Resilient occupancy:** extra or stored energy solutions in case of power outages, community awareness programs, special support to particularly vulnerable populations (elderly, children).

Specifically:

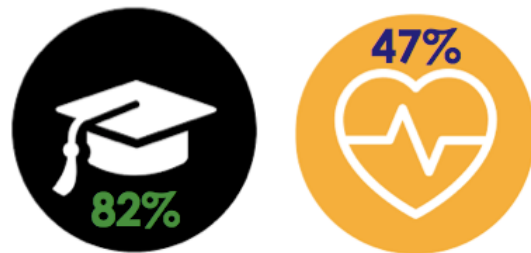
- ★ The **MKNO** project in Paris has paid particular attention to the climate hazard relating to increase in average temperatures. The team has conducted climate change analyses for several different scenarios in order to project the impact of heat hazards for this site. Following this study, the adaptation plan intends to reduce the site temperature by 3°C during a heat wave event. This is possible due to evapotranspiration plants and optimized green spaces.
- ★ The **Urban Battery** project in Madrid intends to be particularly resilient against heavy rain and heat wave event. It has strict quantified ambitions to mitigate such risks. 40% of the façades face west in order to be more in the shade. 60% of the wall surfaces are to be painted in a reflective light coating. Finally, 50% of the site's surface is to be permeable to absorb rainwater as a result of available soil space.

>>> Challenge 5: New green services for the site and neighborhood

Reinventing cities also offered the possibility for teams to promote indirect benefits in the fifth challenge : "New green services for the site and neighborhood".

This challenge encouraged the candidates to use the project and site as a catalyst to develop innovative urban services for the neighborhood. The latter in turn helps to reduce the environmental footprint of the city and creates social community benefits. The candidates were encouraged to promote reduced air, water and soil pollution as well as consider health, culture and education programmes within the green climate change solutions.

Ecological services: 82% of winners provide ecological services for the neighborhood to improve health and 47% provide educational services



Solutions from the winning teams:

- **Benefits to the whole neighborhood:** renewable energy production, shared economy services, local food production, green public space, water management services.
- **Social benefits of green services:** cultural impact, social cohesion, community gathering areas.
- **Health benefits of green services:** reduced air pollution, reduced noise pollution, reduced chemical and greenhouse gas emissions pollution.
- **Education benefits of green services:** biodiversity workshops, school trips to the greenhouses, innovative energy demonstrations.

Specifically:

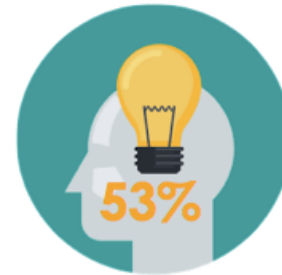
- ★ In Oslo, for the Fossumdumpa site, the project **Recipe for Future Living** seeks to provide as many ecological services to the site residents and neighborhood as possible. In order to create climate awareness in the neighborhood, the project aims to teach residents how to compost to create healthy soils and reduce methane emissions from otherwise organic waste going to landfill. Finally, this initiative educates residents on carbon capture and storage as well as the importance of healthy soils.
- ★ The **Demain Montréal** project has strong ambitions in terms of ecological services for the neighborhood. Eco-responsibility is a key value that has been represented by the integration of a SOUK into the project. This space will welcome circular economy activities, fab labs, a microbrewery and a zero waste grocery store.
- ★ The **Lifandi Landslag** team in Iceland, intends to focus on pedagogical services. As education is key when considering climate change mitigation and adaptation needs, this building design includes a nature museum and dedicated education areas to learn about climate change and physical climate-related risks.
- ★ In Paris, the **Odysée Pleyel** project has many objectives to provide a program over the years including many activities for the neighborhood. Conferences and workshops will be held on the topic of climate change but also on energy and biodiversity. The project furthermore intends to host up to 10 000 students every year or two school classes daily. Finally, the "You are energy" festival on the theme of environment and energy will help educate the youth.

>>> Challenge 6: Green growth and smart cities

As a sixth challenge: "Green growth and smart cities", candidates were encouraged to use digital solutions in order to allow for efficient use of resources and promote community connectivity.

Solutions for this challenge demonstrated how projects contribute to the smart city agenda, for the design, construction and management of the sites. Candidates showed how digital technologies can foster sustainability and innovation. Concerning green growth, candidates used different partnerships and connections to engage with local economic actors in order to promote job creation in the green sector. Many solutions included entrepreneurial support for green start-ups.

Green growth: 53% of winning teams have incorporated an ecological incubator or start-up support within their project



Solutions from the winning teams:

- **Smart city approach:** use of Building Information Modeling (BIM), virtual reality tools, Artificial Intelligence (AI) designs, sensor technology for monitoring of resource consumption, transport applications for optimized circulation.
- **Green growth support:** coworking workspaces, start investments, incubator programs, networking opportunities, partnerships with local industries, job creation.

Specifically:

- ★ In Auckland, the **Te Kopua** project intends to use new technologies in favor of sustainability. Digital tools are key to promote and manage a sustainable lifestyle. The project includes an awareness campaign through an educational website. This website will also provide real-time data on resource and energy consumption and provide tips to reduce consumption.
- ★ The centerpiece of the Paris **MKNO** project is to promote start-ups, help youth find work in the energy sector and encourage entrepreneurs to come up with sustainable business models. The project seeks to construct a 1000 sqm mobility incubator called the "Garage Bleu". This will create jobs and spur green growth.



Challenge 7: Sustainable water management

The seventh challenge "Sustainable water management" gave the candidates the opportunity to promote solutions regarding water savings for the sites that are exposed to droughts and to promote solutions regarding water retention in the case of flooding.

Teams considered both potable and non-potable water management systems in the design of their project and prioritizing water savings in general. Water treatment, reuse and recycling were also proposed by many candidates in order to maximize sustainable water management. These solutions depend on the climate impacts on water sources for each specific area and were often accompanied by the climate resilience risk analysis.

Sustainable water management:
53% of winners will reduce residents' water consumption by at least 50% annually



Solutions from the winning teams:

- **Water scarcity management:** water efficient equipment, low-flow fixtures, smart-metering to track consumption, rainwater capture and storage, water reservoirs, greywater reuse for irrigation.
- **Excess water management:** run-off water infrastructure, sustainable urban drainage, permeable surfaces, parks and green space, flooding plans.
- **Water treatment:** drainage systems, greywater to energy systems and wastewater treatment facilities integrated with biomass systems in order to produce potable water.

Specifically:

- ★ In Chicago, the **Garfield Green** project has an innovative way to manage excess rainwater where an "Innovative soils" technology is applied. Cells are located underneath the sidewalks and can absorb stormwater and rainwater runoff.
- ★ In Auckland, the **Te Kopua** project has a strong strategy for sustainable water management, recovering water to be used as potable water on-site. Up to 40% of the water consumed is to be recovered due to an innovative water treatment facility : the "Living Machine" that is based on phytoremediation: using living plants to clean up water.
- ★ In Madrid, the **Mercado Habitado II** project for the site of Orcasur has a water treatment innovation. Greywater filtration will be made possible so that the treated water can be reused for irrigation and cleaning. Moreover, the facility is well-equipped with-IT sensors to monitor and control exactly where irrigation is needed.
- ★ In Milan, the project **Teatro delle Terme** aims to convert former historic stables into a new generation of thermal activity centre. In addition, to an on-site energy production that aim to meet the need in energy, the project will extract the natural water springs in the subsoil for the thermal activities.

>>> Challenge 8: Biodiversity, urban re-vegetation and agriculture

The eighth challenge: "Biodiversity, urban re-vegetation and agriculture" made sure that the Reinventing Cities competition will encourage candidates to make their cities greener.

Teams promoted biodiversity by increasing green space and by selecting specific plant species that are endemic and adapted to local climate. Also, the planting of species that have a high evapotranspiration potential has been proposed by many teams in order to combat the urban heat-island effect. Urban agriculture solutions have been encouraged to increase self-sufficiency in terms of on-site food production and help residents learn about biodiversity through community- and urban gardens.

Biodiversity: the winners will enable up to **105 000 sqm** of green area and urban agricultural land



Solutions from the winning teams:

- **Biodiversity protection and preservation:** ecological assessments, presence of blue/green grids on a large scale, planting of indigenous species, creation of wildlife corridors, green roofs and walls.
- **Local agriculture:** dedicated food production sites, policies for local procurement and sourcing of agricultural products.
- **Urban revegetation:** public waterways, large share of green area devoted to public space and parks.

Specifically:

- ★ The **Campus for Living Cities** project for the Vallecas site in Madrid will become the new biodiversity hotspot of Madrid. From "insect hotels" to alcoves in the walls providing nesting spots for birds, the building combines many different ways to create or re-create habitats for local animal species. It furthermore integrates heat-resistant local plants providing extra shelter.
- ★ The **Urban village** team project in Oslo Furuset, promotes urban agriculture and biodiversity with a large greenhouse for vegetables, herbs and fruit. Multiple green areas create different microclimates and habitats in order to extend the range of species on-site.
- ★ The Milan **L'Innesto** project will use biodiversity in order to spur economic growth and grow edible produce. In addition to extensible green spaces that will cover 60% of the site, there will be horticulture projects on-site, a tree nursery, as well as an orchard which is set to occupy a significant portion of the site's surface. These activities will create more local green jobs.
- ★ The **Demain Montréal** project will use biodiversity in order to guarantee sustainable local food production and thus a certain level of self-sufficiency for residents. By working with biologists and government partners this project intends to produce 423 200 kg of food each year avoiding 171 tCO₂e emissions.

>>> Challenge 9: Inclusive actions and community benefits

As these projects are required to also fulfill social needs, the ninth challenge on "Inclusive actions and community benefits" gives candidates the opportunity to address other non-environmental issues.

The candidates placed a high emphasis on understanding the specific neighborhood context in order for their projects to respond to major needs, challenges and issues of local residents and businesses. Examples include projects that will be accessible for everyone (social background, age, gender, origin, economic status, etc.), prioritizing dense, mixed-use development, and promoting inclusive community projects.

Community engagement: 74% winning teams commit to organize workshops with the local community



Solutions from the winning teams:

- **Engage local community:** stakeholder mapping tools, roundtables and community engagement events, culture emphasis, exploratory walks with local stakeholders, transitory occupation of site to foster development of new uses.
- **Meet local needs:** participatory apps, workshops, projects, social and affordable housing, inclusive services such as kindergarten, local shops.
- **Promote diverse living:** student services, multi-generational infrastructure, cooperative- and participative housing arrangements.

Specifically:

- ★ Among the expected benefits from the **MKNO** project for Canal de l'Ourcq site in Paris, is the wide range of residential solution offered to address both students and family's residential needs. In addition, the project stands out by promoting new collaborative urban planning practices with the local community, thanks to "**place making**" workshops, centered on **user experience** and aiming at refining the overall site program.
- ★ **L'Innesto** will be the first carbon neutral social housing project of Italy, demonstrating that environmental consideration and social impact go together.
- ★ The **Garfield Green** project in Chicago, consists of a new residential community of 77 new mixed-income residential units and 9,000 sf. of community/retail space. The team focused on inclusion and equity and sets ambitious goals in terms of social impact of the project. Garfield green offers cooperative housing for homeownership and affordable units, but also by creates new amenities and services for the neighborhood . A large open space will promote the neighborhood's assets and story (memorial Plaza and park), space for healthcare, job-training and co-working spaces. In addition, the construction process suggested by the team will employ up to 150 local residents.
- ★ **Tercer Sonido** stands out in the competition by being the very first living laboratory for sustainable sound creation in Madrid. The project took up the challenge of creating innovative cultural and artistic amenities to attract the music industry whilst improving living conditions of inhabitants and workers of the industrial area where the site is located. The team designed a very convincing program composed of mixed-income housing, a music factory, rehearsal rooms, sports areas, canteen-stage, auditorium, food services, organic store, etc.
- ★ **Mercado Habitado II** project in Madrid will reactivate a disused market in a low-income neighborhood of Madrid. The program is structured around a large central space that connects the exterior and the interior to become the social center and market. Through principles based on cooperation, the project develops activities for intergenerational and social solidarity. The project will respond to the needs of the elderly by providing serviced accommodation whilst maintaining a certain degree of autonomy thus improving the quality of life.

>>> Challenge 10: Innovative architecture and urban design

The final challenge refers to "Innovative architecture and urban design".

The candidates proposed to upgrade the sites whilst maintaining a neighborhood esthetic coherence. The projects demonstrated that they could show new innovative solutions and still be integrated into the current urban environment and wider neighborhood. World-class architecture techniques were used for bioclimatic spatial design, building form, choice of materials, use of natural light and artistic elements. Projects made sure that the architecture design was as sustainable as possible. Examples include activating "underutilized" spaces, such as rooftops or basements, designing public space to foster green activities and connectedness

using passive bioclimatic design to ensure energy frugality and thermal comfort.



Solutions from the winning teams:

- **Integration with surroundings:** respect of cultural heritage, continuity of walking and cycling routes and public spaces across the site.
- **Sustainable architecture:** low-carbon materials, recycled materials, bioclimatic design, innovative design for climate resilience.
- **Modularity:** flexible building structures that can be used for different purposes, that can be easily deconstructed and repurposed.

Specifically:

- ★ In Madrid's Villaverde, the **Tercer Sonido** project intends to be self-sufficient in terms of energy. This has only been made possible thanks to a bioclimatic architectural design. The design is set out to be as energy efficient as possible allowing for an energy consumption of less than 30KWh per sqm. The structure is to be modular where the wood materials are to be sourced locally. Natural ventilation has been taken into account with shaded areas and green space integrated in the design.
- ★ The **Lifandi Landslag** project in Reykjavik seeks to achieve a minimal environmental footprint as a result of the design. The aim is to reach a BREEAM certification level of Excellent, addressing land-use, well-being, water, materials, pollution, waste and energy. The project's bioclimatic architectural design assures wind protection, maximal sunlight exposure and excellent insulation.
- ★ The **Vitae** building has an iconic architecture while the project intends to significantly reduce its carbon impact and its energy consumption. In addition, the project uses the vegetation to improve not only biodiversity and resilience, but also as design's tools. The "Green Spiral", which is a path with a vine pergola rising to the top of the building, is particularly stunning.

Key facts & Numbers about Reinventing Cities

- Altogether, the sites account for more than **2.2 million square meters** to redevelop
- **230 Expressions of Interest received**
- More than **1,200 participating companies** joined the competition
- Some of the world's greatest architects & firms joined: OMA, MVRDV, BIG, White Architecture, Carlo Ratti, Rudy Riciotti, Tatiana Bilbao, Miralles Tagliabue, Perkins+Will, Gensler, ARUP, ENGIE etc.
- **19 nationalities** took part in the final phase of the competition, among which firms from Australia, Brazil, Canada, China, Denmark, France, Greece, Iceland, Italy, Germany, Mexico, the Netherlands, New Zealand, Norway, Slovenia, Spain, Sweden, the UK, the US,
- Multidisciplinary teams: **the finalist teams were composed of 14 companies on average**
- **Hundreds of innovative solutions** proposed, including creative solutions for energy; new types of material for construction; solutions to implement the circular economy and zero-waste approaches; urban farming and local food production ideas; new services to engage citizens toward greener ways of living
- **350 press articles**
- More than **1 Million** #ReinventingCities hashtag impressions on social media
- **2,500 subscribers** on the newsletter and **300,000 visitors** on the website