



	EU Country	Challenge	Company Profile
3mar Ltd	Finland	1. BC Ferries - Vessel on-board energy reduction (Wave 3)	1. Over 35 years of experience in the global naval architecture cluster, 3Mar was created as a starburst / spin-out to better cater for the growing demands of decarbonizing the maritime industry. (https://3mar.fi/)
Awake.AI	Finland	1. Optimisation of energy use at ports – Vancouver Maritime Centre for Climate (Wave 2)	1. Awake.AI is leading software platform for Smart Port and Smart Shipping. Awake.AI developed an application called Smart Port that includes first ship-to-port digital interface. Learn more (https://www.awake.ai/)
Azelio	Sweden	1. SPA Aqua Prima - Energy reduction for wellness facilities (Wave 3) 2. City of Toronto: Community Scale Residential Energy Storage (Wave 3)	Azelio developed TES.POD® a cutting-edge thermal energy storage technology, producing clean energy where and when you need it. It provides access to renewable energy as electricity and usable heat around the Clock and when you need it the most (http://www.azelio.com)
BDI Bioenergy	Austria	1. FOG to fuel - Walker Industries (Wave 2)	Since its founding in 1996, BDI Bioenergy has been developing resource-saving technologies for upgrading residual and waste streams from industry, supporting the costumers throughout the whole value chain. Learn more (https://www.bdi-bioenergy.com/en/)
Bert Energy	Germany	1. Manure Emissions Capture and Revaluation - Mapple Leaf Food (Wave 1) 2. Waste to RNG – Tourmaline (Wave 2)	Bert is the name of the product family for farm size biogas plants. Bert is specialised in the utilisation of slurry and manures without the use of energy crops for the biogas product, with end products Biogas and fine fertilizer. Learn more (https://bert-energy.com/)
BIA	The Netherlands	1. VEC Fortis BC - Residential EV charging optimization (Wave 3)	BIA builds technology that solves relevant industry challenges today while positioning Bia tech for scale in the exciting future of e-mobility and grid interoperability (http://www.biapower.io)
Biogas Hochreiter	Germany	1. Manure Emissions Capture and Revaluation - Mapple Leaf Food (Wave 1) 2. Waste to RNG – Tourmaline (Wave 2) 3. Gaseification – Suncor (Wave 2)	Biogas Hochreiter is one of the pioneers in the field of biogas plants, operating since the early 1980's, creating a reliable and efficient benchmark. The company envisions to create an energy supply with a future, being among the world leading innovative and established full-service providers. Learn more (https://www.biogas-hochreiter.de/en/)
Biopap	Italy	1. Sustainable in-flight service – AirTransat (Wave 2)	Patented food packaging concept, resistant to extreme temperatures range, issued from renewable, non-food, biodegradable and compostable raw materials. Learn more (https://www.biopap.com/)



	EU Country	Challenge	Company Profile
Black Locust Lumber Global inc C-Green	Hungary	1. VEC City of Vancouver - Urban rainwater run-off reuse (Wave 3)	Black Locust Lumber is a specialist supplier for sustainable architectural projects in decking, urban green spaces, pavers, site furnishings, and more (https://www.blacklocustlumber.com/)
	Sweden	1. Walker - Biosolids upcycling (Wave 3)	C-Green is a Swedish company, founded in 2014. C-Green vision is to be the global leader in sustainable sludge and wet organic waste handling solutions and contribute to a climate-neutral and circular society. C-Green is headquartered in Solna, near Stockholm (https://www.c-green.se)
Carbiolice	France	1. Sustainable in-flight service – AirTransat (Wave 2)	Carbiolice's mission is to develop biobased, biodegradable and compostable plastic solutions, with a respectful environmental footprint. Learn more (https://www.carbiolice.com/en/)
CarbonOro	The Netherlands	1. Carbon Capture Utilization & Storage - Canadian Natural (Wave 1) 2. Small-scale modular CCUS – Tourmaline (Wave 2)	CarbonOro's goal is to mitigate climate change by turning landfill or anaerobic digestion plant into a source of renewable energy. CarbonOro companies reducing their CO2 footprint, resulting in a more sustainable eco friendly environment. Learn more (https://www.carbonoro.com/)
Celloz	France	1. Bioproducts Development in the Forestry Sector - FPIInnovation (Wave 1)	Celloz developed an innovative eco-friendly biomaterial coming from cellulose fibre, allowing to design all type of roofs, in all shapes and colours. Learn more (https://www.celloz.fr/home)
Clever Solar Devices	Spain	1. Hydrogen/solar – Suncor (Wave 2)	CSD is devoted to the digital transformation for the optimization of the operation and management of solar photovoltaic plants, in real-time. Learn more (https://www.cleversd.com/en)
Coval Energy	The Netherlands	1. Carbon Capture Utilization & Storage - Canadian Natural (Wave 1)	Coval Energy is a clean-tech company developing breakthrough solutions for CO2 utilization. They have developed a unique CO2 utilisation process, that enables efficient electro-catalytic reduction of CO2. Learn more (https://www.covalenergy.com/)





EU Country

Challenge

Company Profile

Cryo Pur	France	<ol style="list-style-type: none"> 1. Post-combustion CO2 capture- NATURAL GAS INNOVATION FUND (Wave 2) 2. Diesel displacement for fleet operations – Tourmaline(Wave 2) 3. Gasification - Suncor (Wave 2) 4. Low-carbon fuels for marine vessels - VANCOUVER MARITIME CENTRE FOR CLIMATE (Wave 2) 	<p>Cryo Pur designs, manufactures, commercializes and services a range of equipment for cryogenic biogas upgrading, biomethane liquefaction and bio-CO2 liquefaction. Learn more (http://www.cryopur.com)</p>
Daku Italia S.r.l.	Italy	<ol style="list-style-type: none"> 1. VEC City of Vancouver - Urban rainwater run-off reuse (Wave 3) 	<p>Since 1997, Daku offers the most advanced technology for rooftop gardens and always invests in the innovation of our systems (https://www.daku.it/en/daku/mission)</p>
Dexema	Spain	<ol style="list-style-type: none"> 1. VEC Translink - Operational energy reduction for transport buildings 	<p>DEXMA EMS is a native SaaS solution, centralizes and adds consistency to the organization's data on consumptions with environmental impact facilitating organizations to automatically monitor, track and report over time their consumptions and emissions (https://www.dexma.com/)</p>
Econward Tech	Spain	<ol style="list-style-type: none"> 1. VEC City of Vancouver - Municipal waste reduction and reuse (Wave 3) 2. Walker - Biosolids upcycling (Wave 3) 	<p>Econward designs, builds, and supplies an innovative, patented Thermal Hydrolysis technology called the BIOMAK®, which treats the organic fraction of MSW. This technology is a pre-treatment technology for anaerobic digestion. (https://www.econward.com/)</p>
Electrochea	Germany	<ol style="list-style-type: none"> 1. Carbon Capture Utilization & Storage - Canadian Natural (Wave 1) 	<p>Electrochea's technology produces renewable methane to replace fossil fuels. Their proprietary process to produce renewable methane at industrial scale, can be used to green the gas grid, continue to green the power grid, and recycle any source of CO2. Learn more (https://www.electrochea.com/)</p>



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Company Profile

Enalos	Greece	1. Circular tailings - Arcelor Mittal (Wave 2)	ENALOS develops the optimum recipe for producing functional materials through valorization of industrial or municipal wastes, with outstanding mechanical and thermal properties. Learn more (https://enalos.com/)
Enerpoly	Sweden	1. City of Toronto - Community scale residential energy storage (Wave 3)	Enerpoly is pioneering the rechargeable zinc-ion battery, solving the problems of energy storage affordability and availability. By replacing higher-carbon methods of energy generation, energy storage solutions using Enerpoly batteries can mitigate over 200 million kg of CO _{2eq} annually with each GWh installed. (https://enerpoly.com/)
Enertime	France	1. Waste heat recovery - NATURAL GAS INNOVATION FUND (Wave 2)	Enertime is a leading specialist of waste heat recovery in the industries. They design, develop, and manufacture thermodynamic machines with high capacities, such as Organic Rankine Cycles (ORCs), industrial heat pumps (HP), and natural gas expansion turbines (Turbo-expanders). Learn more (https://www.enertime.com/)
EnviTec Biogas	Germany	1. Manure Emissions Capture and Revaluation - Mapple Leaf Food (Wave 1)	Portfolio of solutions for construction and operation of biogas plants. Learn more (https://www.envitec-biogas.com/)
ETIA <i>(Evaluation Technologique, Ingénierie et Applications)</i>	France	1. Gasification - Suncor (Wave 2)	ETIA is a French engineering group specialized in ecotechnologies: innovation, equipment, and processes for continuous thermal treatment, focusing in the engineering of circular economy products. Learn more (https://etia-group.com/)
Exergyn	Ireland	1. Waste heat recovery - NATURAL GAS INNOVATION FUND (Wave 2)	Exergyn, a creative clean-tech company, is a pioneer in the commercial scale application of shape memory alloys (SMA), focusing on reducing global GHG emissions. Learn more (https://www.exergyn.com/)





EU Country

Challenge

Company Profile

FairBrics	France	<ol style="list-style-type: none"> 1. Carbon Capture Utilization & Storage - Canadian Natural (Wave 1) 	<p>Fairbrics is developing the first synthetic fiber with a net positive impact on climate change and capable of meeting the demand of the market. Fairbrics converts waste CO2 into polyester fabric using molecular chemistry. With this technology, polyester can be produced with least environmental impact. Learn more (https://fairbrics.co/)</p>
Field Factors BV	The Netherlands	<ol style="list-style-type: none"> 1. VEC City of Vancouver - Urban rainwater run-off reuse (Wave 3) 	<p>Developers and builders of a new generation of nature-based water technology solutions for a sustainable built environment. We combine urban design, engineering, and water science and technology to create solutions that make the urban water cycle sustainable (https://www.fieldfactors.com/)</p>
Finrenes	Finland	<ol style="list-style-type: none"> 1. Waste to RNG – Tourmaline (Wave 2) 	<p>Finrenes has patented a system and method for processing waste biomass into biogas and brown pellets (from lignocellulosic) which can be used as fuel to power generation replacing coal. Learn more (http://www.finrenes.com/en/)</p>
FN NANO	Czech Republic	<ol style="list-style-type: none"> 1. Breathing space (Alberta Lung Association) - Indoor air quality solutions (Wave 3) 2. VEC Translink - Operational energy reduction for transport buildings (Wave 3) 	<p>FN-NANO s.r.o. is an innovative Czech company focused on nanotechnology. The company developed an effective photocatalytic "2nd generation" functional coatings that have an exceptionally strong photocatalytic effect compared to other products using the same phenomenon. (https://fn-nano.com/?lang=en)</p>
Frieco Benefit Corporation srl	Italy	<ol style="list-style-type: none"> 1. VEC City of Vancouver - Municipal waste reduction and reuse (Wave 3) 	<p>Frieco Società Benefit srl is an innovative startup, which intends to implement innovative solutions for waste management, responding to the social and environmental challenge linked to the separate collection, treatment, recovery and recycling.</p>



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Glass Forever	Denmark	1. Sustainable in-flight service – AirTransat (Wave 2)	Produce Reusable, recyclable and environmentally friendly plastic glasses, cups & decanters. Perfect to all industries who today are using single-use and disposable glasses. Or are using regular drinking glasses and cups and want a healthier and lighter working environment. Learn more (https://www.glassforever.com/)
Green-Basilisk BV	The Netherlands	1. VEC City of Vancouver - Low carbon construction materials and equipment (Wave 3)	It is Green Basilisk mission to make sustainable products for the construction market. Our main product is self-healing concrete. This additive gives concrete the ability to autonomously heal cracks by using microorganisms. (http://www.basiliskconcrete.com)
Goodfuels	The Netherlands	1. Low-carbon fuels for marine vessels - VANCOUVER MARITIME CENTRE FOR CLIMATE (Wave 2)	GoodFuels is a pioneer, global market maker and market leader in truly sustainable biofuels. GoodFuel goal is to accelerating the energy transition in the maritime and Road & rail transport segments for which biofuels are one of the best or only viable alternatives in the foreseeable future. Learn more (https://goodfuels.com/)
Heritah and Skills of High Service s.r.l.	Italy	VEC City of Vancouver - Municipal waste reduction and reuse	HSH Service was born from the convergence of skills and competencies gained in different industrial sector spanning from Chemical up to Aerospace&Defence. with the aim of developing winning solutions for innovative and successful businesses (https://www.hshservice.eu/)
HT Materials Science Ltd.	Ireland	1. VEC Translink - Regional transport decarbonization (Wave 3)	HT Materials Science is the developer of Maxwell® – an award winning, innovative, sub-micron heat transfer fluid technology. Maxwell® is a 'drop-in' additive for use in new or existing commercial and industrial heating and cooling systems. (http://www.htmaterialsscience.com)
IGW (Innovative Green World)	Italy	1. Diesel displacement for fleet operations – Tourmaline (Wave 2)	IGW was founded in 2012 as an engineering company specializing in technical-economic consultancy for Biogas and Biomethane plants: from the feasibility of the project to the project itself up to the coordination of the construction site during the construction phase and the optimization of power supply plans. Learn more (https://www.igwsrl.com)
Ineratec	Germany	1. Low-carbon fuels for marine vessels - VANCOUVER MARITIME CENTRE FOR CLIMATE (Wave 2)	Modular chemical reactors, suited for fluctuating renewable energy applications due to high load flexibility. Learn more (https://ineratec.de/en/home/)



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Company Profile

INERGYS	France	1. City of Toronto - Residential in-building renewable energy generation (Wave 3)	INERGYS is researching, manufacturing and installing systems which generate electricity by extracting energy from combined renewable sources. The Company's flagship product, the "GreenPack" integrates an efficient urban wind turbine with photovoltaic panels. (http://www.inergys.fr)
Kayros	France	1. Methane Leak Detection - Canadian Natural (Wave 1)	Kayros measures and monitors energy, natural resource and industrial activity worldwide by harnessing machine learning, natural language processing and advanced mathematics to satellite imagery, geolocation data, textual information and other raw alternative data. Learn more (https://www.kayros.com/)
KING DIAMOND SLU	Spain	1. SPA Aqua Prima - Nutrient Recycling & Bioremediation solutions (Wave 3)	The company designed and provided a patented Biological denitrification process for groundwater and surface water (http://www.ufbaf.com) .
Klusterdot Oy	Finland	1. BC Ferries - Vessel on-board energy reduction (Wave 3)	Klusterdot was founded as a shipyard and owner spin off to accelerate innovation through collaboration and synergies in the shipbuilding industry. We offer concept development with versatile portfolio and experience. (http://www.klusterdot.io)
Koepala Packaging	Finland	1. Sustainable in-flight service – AirTransat (Wave 2)	Innovative flat food packaging for sustainable and convenient meals. Learn more https://www.koepala.com/
Leef Blattwerk	Germany	1. Sustainable in-flight service – AirTransat (Wave 2)	Sustainable food packaging based on compostable leef products. Learn more (https://leef.bio/en/)
Makron Oy	Finland	1. BC Ferries - Vessel on-board energy reduction	Makron is a complete industry service house with strong automation expertise. We build automation systems from the concept stage to successful completion. Makron has a revenue of 13 MEUR, and we employ over 100 professionals. (http://www.makron.com)
MaritimeAPI	Greece	1. VEC Translink - Regional transport decarbonisation	Maritimeapi offers a decarbonization platform for ships. Users can monitor their carbon footprint with ESG reporting, reduce their carbons with voyage optimization and offset with market-based measures (voluntary carbon credits), all in platform. (http://maritimeapi.co)





EU Country

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Company Profile

MetGen	Finland	1. Bioproducts Development in the Forestry Sector - FPInnovation (Wave 1)	Innovative bio-based materials alternatives to oil based materials and products. Learn more (https://www.metgen.com/)
MetroPolder Company	The Netherlands	1. VEC City of Vancouver - Urban rainwater run-off reuse (Wave 3)	MetroPolder is an urban water management firm with a focus on rainwater capture and reuse. We transform urban surfaces into monitored and controlled reservoirs in which rainwater is reused for circular and climate adaptive uses. (http://MetroPolder.com)
Mitis	Belgium	1. Gas powered heat pumps - NATURAL GAS INNOVATION FUND (Wave 2)	Mitis is developing, manufacturing and selling micro-CHP (Combined Heat and Power) systems based on micro gas turbines in the range of 10kWe to 50 kWe. Learn more (https://www.mitis.be/)
Münzer Bioindustrie GmbH	Austria	1. VEC City of Vancouver - Municipal waste reduction and reuse	Muenzer Bioindustrie GmbH is one of Europe's largest producer of waste-based Biodiesel and the largest disposal company for liquid waste and Used Cooking Oil in Central Europe. Muenzer is running operations in Europe, India, Bangladesh and Africa.) (https://www.muenzer.at/en/home.html)
Mycroft Mind	Czech Republic	1. Optimisation of energy use at ports - VANCOUVER MARITIME CENTRE FOR CLIMATE (Wave 2)	Mycroft Mind's aim is to deliver and build a portfolio of innovative systems for processing and analysing the new era of big data collected from new sources intelligent smart grids or IoT (Internet of Things). Learn more (https://www.mycroftmind.com/)
Navigate	Czech Republic	1. FOG to fuel - Walker Industries (Wave 2)	Navigate has been developing biotechnological solution for upcycling waste into the biopolymer PHA and its applications in cosmetics and biomedicine. The company aims for a nature-based solution that meets the Sustainable Development Goals. Learn more (https://www.navigate.com/)
Norsepower	Finland	1. Reduction of long-haul shipping energy - VANCOUVER MARITIME CENTRE FOR CLIMATE (Wave 2)	Norsepower's mission is to reduce the environmental impact of shipping through the commercialisation of innovative and modern rotor sails. Learn more (https://www.norsepower.com/)





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Company Profile

OMICA	Italy	1. Methane Leak Detection - Canadian Natural (Wave 1)	OMICA provides a unique tool to support the research and sustainable management of the various systems. Technology and innovation are therefore the main solutions to the economic, social and environmental risks of the planet; transform global threats into business opportunities to support sustainable growth. Learn more (https://www.omica.it/en/front-page/)
Polar Developments	Spain	1. Optimisation of energy use at ports - VANCOUVER MARITIME CENTRE FOR CLIMATE (Wave 2)	Polar Developments develops and markets deployment systems for portable photovoltaic generators, with space technology that allow the generation of electrical energy anywhere, and with a fast installation and removal time. Learn more (https://polardv.es/)
QPinch	Belgium	1. Carbon Capture Utilization & Storage - Canadian Natural (Wave 1) 2. Carbon Capture Utilization & Storage - COSIA (Wave 1)	Heat Transformer - Carbon neutral industrial energy from waste heat. The company uses a natural chemical reaction to capture waste heat and to transform it into process heat, that improves energy efficiency and emissions with paybacks between 3 and 5 years.. Learn more (https://www.qpinch.com/)
Renergy 1.618	Italy	1. Waste heat recovery - NATURAL GAS INNOVATION FUND (Wave 2)	Recovery, production, and processing of Sun, geothermal energy or heat dissipation into electrical energy. Learn more (https://www.renergy1618.com/)
Real Carbon Technology	Poland	1. Gasification - Suncor (Wave 2)	Real Carbon Technology's patent-protected solution offers direct CO2 and Hydrogen to methanol conversion faster and cheaper than traditional methods. Learn more (https://www.realcarbontech.com/)
Resourcefull	Belgium	1. Circular tailings - Arcelor Mittal (Wave 2)	ResourceFull transforms metallurgical and mining by-products into minerals suitable for the production of the next generation of concrete. Learn more (https://www.resourcefull.eu/)
Tema	Hungary	1. Electrification of marine vessel operations - VANCOUVER MARITIME CENTRE FOR CLIMATE (Wave 2)	Development, construction and production of electric motors and automation systems. Learn more (https://www.tema.hr/)





	EU Country	Challenge	Company Profile
Rocsys B.V.	The Netherlands	1. VEC City of Vancouver - EV Charging Infrastructure (Wave 3)	Rocsys is a tech company founded in the Netherlands, that creates reliable autonomous charging solutions by combining soft robotics and cutting-edge computer vision technologies, in combination with data-driven services for fleet optimization. (http://www.rocsys.com)
SmartWatcher Oy	Finland	1. Breathing space (Alberta Lung Association) - Indoor air quality solutions (Wave 3)	SmartWatcher's mission is to help customers having clean indoor air, which is monitored with high quality sensors developed by the company. Data is used to operate the state-of-the-art air purifier, that cleans 99,95 % of all viruses and 99,99% of smallest particles. (http://www.smartwatcher.fi)
Sunthalpy Engineering, S.L.	Spain	1. City of Toronto - Residential in-building renewable energy generation (Wave 3)	Engineering company that has developed low enthalpy building technology. The technology can heat up a building using water from 21°C thanks to the super heat transfer emitters. With resilient collectors, it creates efficient integrated thermal storage. (https://sunthalpy.com/en/solar-house/)
TakeAir	Belgium	1. SPA Aqua Prima - Energy reduction for wellness facilities (Wave 3) 2. Breathing space (Alberta Lung Association) - Indoor air quality solutions (Wave 3)	TakeAir brings the future of breathing to buildings in an exclusively ESG-compliant and sustainable way. With biodiversity at the core, TakeAir delivers a substantial improvement to the indoor built environment, while reducing the carbon footprint. (http://www.takeair.world)
The Predictive Company	Spain	1. VEC Translink - Operational energy reduction for transport buildings (Wave 3)	The Predictive Company offers a SaaS solution for energy optimization and predictive maintenance based on Artificial Intelligence. It can be implemented in any type of non-residential buildings leading to a reduction of costs and CO ₂ emissions of up to 30%. (https://thepredictivecompany.com/)



	EU Country	Challenge	Company Profile
The Sniffers	Belgium	1. Methane Leak Detection - Canadian Natural (Wave 1)	As a global service provider in the oil & gas and (petro)chemical industry, The Sniffers is committed to helping companies realizing their environmental, sustainability, and integrity ambitions. The sniffers develops and executes best-in-class emission management and pipeline integrity programs with a meaningful impact on safety, compliance, environmental footprint, and business profitability. Learn more (https://www.the-sniffers.com/)
Traceless Materials	Germany	1. Sustainable in-flight service – AirTransat (Wave 2)	Using our innovative, patent pending technology and a circular economy approach, Traceless materials is able to transform agricultural industry residues into a novel materials: traceless film, traceless plast and traceless coat. Learn more (https://www.traceless.eu/)
Ubiblue	France	1. Waste heat recovery - NATURAL GAS INNOVATION FUND (Wave 2)	Ubiblue is a French based company specialized in the magnetic refrigeration technology. We design and produce innovative and reversible refrigeration machines based on the magneto-caloric effect. Learn more (https://ubiblue.com/en/home/)
UniqAir Oy	Finland	1. Breathing space (Alberta Lung Association) - Indoor air quality solutions (Wave 3)	UniqAir Oy is a Finnish manufacturer of stand alone indoor air purifiers. Company was established 2014 and employs 24 persons in Finland and in Germany. Company has proven track record and it has been profitable throughout its history. (http://www.uniqair.fi/en)
Urban Air Purifier SL	Spain	1. Breathing space (Alberta Lung Association) - Indoor air quality solutions (Wave 3)	Urban Air Purifier (UAP) develops and manufactures high performance professional air purifiers that clean the air eliminating all kinds of microorganisms (viruses and bacteria) with harmful particles and gases. (https://urbanairpurifier.com/)



EU Country

Challenge

Company Profile

VisBlue	Denmark	1. City of Toronto - Community scale residential energy storage (Wave 3)	VisBlue specialises in energy storage in the form of vanadium redox flow batteries (VRFB). These batteries can be used to boost the utilisation rate of renewables, as it is possible to store surplus production from these for later use. (http://www.visblue.com)
Vertuo	France	1. VEC City of Vancouver - Urban rainwater run-off reuse (wave 3)	How can we make nature durable in cities ? Vertuo creates phreatic table where we don't have anymore access to fertile soil in cities. With this system:- no artificial watering needed all the year, even during harsh heatwaves and 50° F more freshness (https://www.vertuo.city)
WeavAir	Estonia	1. BC Ferries - Vessel on-board energy reduction (Wave 3) 2. VEC Translink - Operational energy reduction for transport buildings (Wave 3)	WeavAir helps operators save up to 30% of operation and maintenance costs, save 20-60% of HVAC-linked energy, and make better decisions to control the spread of airborne contaminants and infection like COVID-19. (http://WeavAir.com)
Windcity	Italy	1. City of Toronto - Residential in-building renewable energy generation(Wave 3)	Windcity operates in the micro-wind sector, developed and patented a passive variable geometry turbine which, by self-adjusting pitch, diameter and rotation, enables energy production even with variable wind flows typical of cities and water surface (http://www.windcity.it/en)