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2150

# Urban Tech 2023

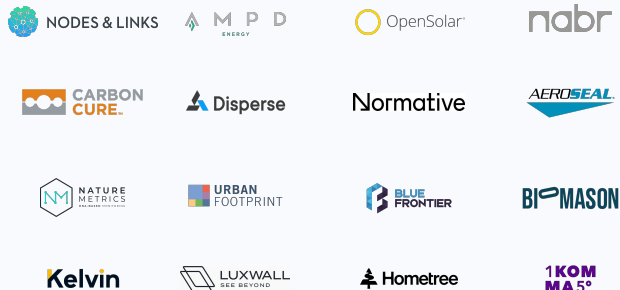
November 2023



# 2150

## Urban Tech Sustainability Fund

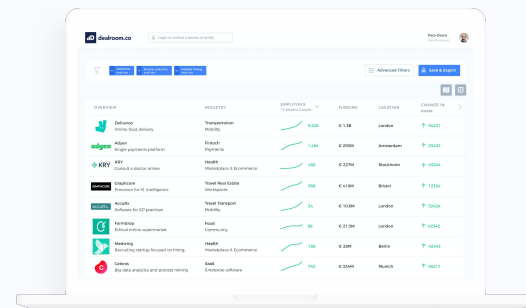
2150 is a venture capital firm investing in technology companies that seek to sustainably reimagine and reshape the urban environment and enable a sustainable and scalable future of mass urbanisation. 2150's investment thesis focuses on major unsolved problems across what it calls the 'Urban Stack', which comprises every element of the built environment, from the way our cities are designed, constructed and powered, to the way people live, work, move, and are cared for. See more at [2150.vc](https://2150.vc)



## Global startup & venture capital intelligence platform.

Dealroom.co is the foremost data provider on startup, early-stage and growth company ecosystems in Europe and around the globe.

Founded in Amsterdam in 2013, we now work with many of the world's most prominent investors, entrepreneurs and government organizations to provide transparency, analysis and insights on venture capital activity.



# Key trends



## Total Urban Tech VC funding

Urban Tech startup funding has already reached \$26.6B and surpassed 2020 levels but this still represents a **39% drop from 2022**.

This decline is largely attributable to a sharp drop in late-stage rounds, on the other hand early and breakout stages are showing more resilience.

**Green buildings startups** are buckling the trend with \$5.3B raised in 2023, on track for their best year ever and marking a **threefold increase from 2020**.



## The Urban Capital Stack

With the climate tech sector maturing towards more large scale deployments and a more challenging funding environment, the capital stack for urban tech goes beyond venture capital to embrace more debt, private equity and project infrastructure financing.

**Climate Tech funds** are also slowing their fundraising. \$13B are projected to be raised in 2023, a **64% decline** compared to last year.

Urban Tech startups are also raising massive amounts of **non-dilutive capital, especially debt**. Nearly **\$17B** have been raised by urban tech startups, near all-time-high and a **threefold increase from 2020**.



## Investment trends

### *Enable:*

**SaaS x construction** startups have suffered a whopping **68% decline** in VC funding **despite the construction industry productivity challenges**.

### *Build:*

**Sustainable building construction** startups on the other hand have raised a record \$2.5B this year, driven by **sustainable cement and green steel**.

### *Operate:*

**Building operation decarbonization** startups on track for their best year with \$2.6 already raised, led by **residential solar and building energy management**.

### *Experience:*

Driven by real world events, startups aiming to prevent and combat **wildfires** have raised over \$100M VC funding, on par with 2021 records.

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# 1

## Introduction

Climate risk is accelerating and cities will play a key role in ensuring we can hit sustainability targets.

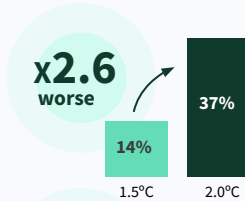
From the buildings we inhabit, to the cars we drive, every urban element can be meaningfully addressed to advance the climate transition.

Urban technologies can support us rethinking and renovating our ways of building and living in cities.

# There's a huge difference in suffered impacts between 1.5°C & 2.0°C.

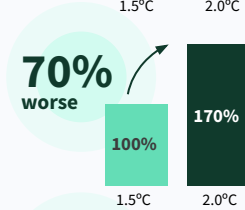
## Extreme Heat

Global population exposed to severe heat at least once every 5 years



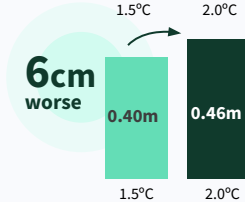
## Flooding

Increase in flood risk



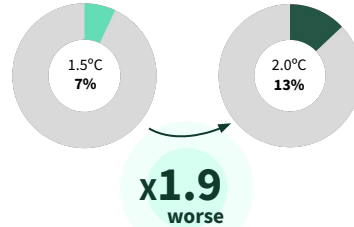
## Sea level Rise

Amount of sea level rise by 2100



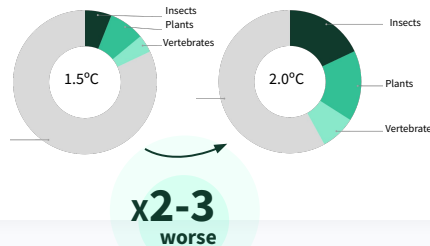
## Ecosystems

Amount of Earth's land where ecosystems will shift to a new biome



## Species Loss

Insects, plants and vertebrates That will lose > half their range



The probability of surpassing the 1.5°C warming limit set by the Paris Agreement is high given the current emissions trajectory and warming already exceeding +1.1°C. Mitigating further temperature rise must be our primary focus, as every 0.1°C increment carries major climate consequences. These include escalating extreme heat, rising seas, biodiversity losses, declining crops and fisheries, and heightened threats to food security.

Simultaneously, we must accelerate adaptation efforts to prepare for and manage the unavoidable impacts of a warmer world. UNFCCC's Synthesis Report of the Nationally Determined Contributions under the Paris Agreement<sup>1</sup> projects peak warming could reach 2.1-2.8°C before 2100.

**This underscores the urgent need for bold, transformative climate action across all fronts.**

# What is Urban Tech?

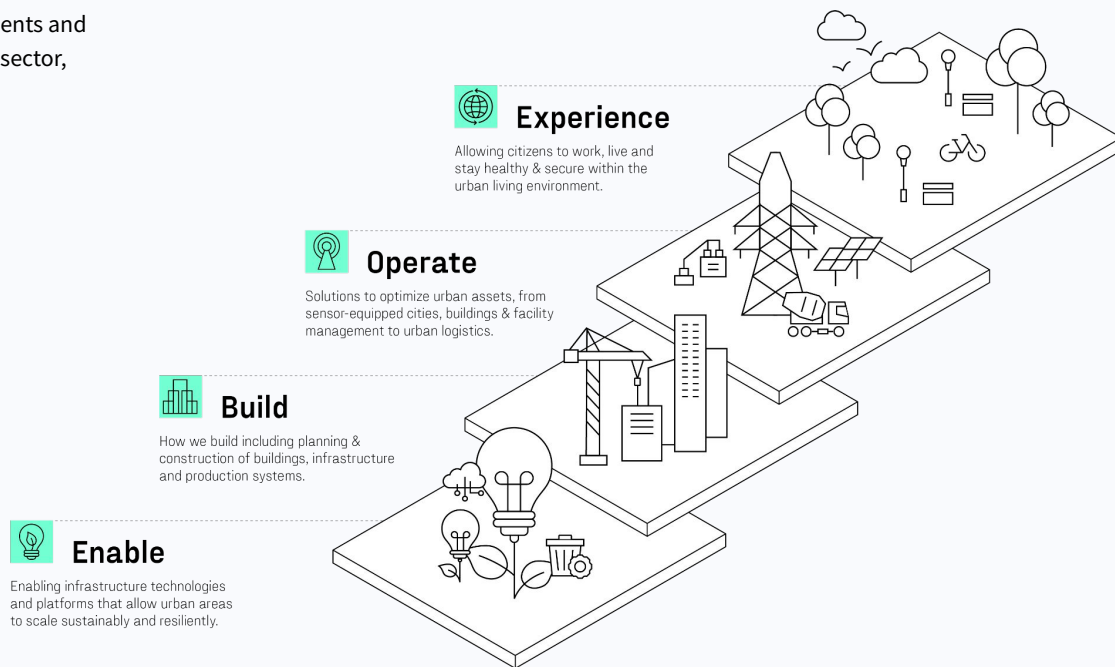
Urban tech is a technology that **improves broad urban environments to make them more sustainable, resilient and efficient.** Although governments and regulation may be involved, urban tech primarily targets the private sector, selling to businesses and consumers directly.

## Why Urban Tech?

Urbanization is accelerating, and fast. By 2050 it is expected that 68% of the global population will live in cities, up from 55% today.<sup>1</sup> We are not prepared for the additional strain on our infrastructure, natural resources, and housing.

Cities consume 3/4 of the world's final energy<sup>2</sup> and produce ~70% of GHG emissions.<sup>3</sup> Urban Tech solutions can play a major role in reducing emissions on an accelerated timeline, which is key to managing current growth.

Building effective cities requires inclusive, healthy, resilient and sustainable solutions. Urban tech startups are building solutions that are reducing emissions and preserving resources TODAY.



1) <https://www.un.org/development/desa/publications/2018-revision-of-world-urbanization-prospects.html>  
2) <https://www.pnas.org/doi/10.1073/pnas.1606035114>  
3) [https://report.ipcc.ch/ar6wg3/pdf/IPCC\\_AR6\\_WGIII\\_FinalDraft\\_FullReport.pdf](https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_FinalDraft_FullReport.pdf)

# Policies worldwide are accelerating the transition to more sustainable cities with focus on building energy efficiency, heating and cooling. Embodied carbon is also starting to appear in some legislations.

## EU

### Energy Performance of Buildings Directive (EPBD) and Energy Efficiency Directive (EED) (2023)<sup>1</sup>

Considering that 1/3 of total greenhouse gas emissions in Europe can be attributed to the building sector, the EU has recently installed new measures aimed to decarbonize existing buildings, such as:

- **Zero emissions buildings (ZEBS)**  
All buildings will have to receive a label D by 2033 and A by 2050.
- **Low carbon district heating**  
By 2040 fossil fuel heating should be obsolete and replaced by mandatory solar installations.

In fact a target of 50% renewable and waste heat has been set for 2035 for all district heating networks.

## US

One year after IRA<sup>2</sup>

One year since passing, the **Inflation Reduction Act (IRA)** is visibly accelerating clean energy investment, deployment, and emissions reductions.

The IRA helped drive record growth in renewable energy, with over **\$270 billion in capital investments** according to American Clean Power Association. For the first time in the US, wind and solar supplied more electricity than coal.

EV sales jumped 66% in early 2023 thanks to IRA tax credits lowering costs by up to \$7,500 per vehicle. EV supply chain investments topped \$50 billion, expected to reduce production costs further.

The IRA allocates \$400 billion in climate incentives over the coming decade, **estimated to catalyze \$2.9 trillion in renewable energy investments by 2050**. It provides a case study of how smart policy design can leverage private capital and accelerate climate solutions.

## Denmark

### Net-Zero Buildings (2023)<sup>3</sup>

Starting this year a maximum value of greenhouse gas emissions for new buildings was put in place on a national scale by the Danish Ministry of Interior and Housing. This initiative made Denmark the **first country to introduce embodied carbon limits into building regulations**.

The entire life cycle of the building is concerned as the regulation aims to minimise energy and resources consumption, include recycling measures, all the while taking into account social and financial values.

1) [https://www.linkedin.com/posts/planet-a\\_planet-a-policy-navigator-activity-7113125993388601344-6xrc?utm\\_source=share&utm\\_medium=member\\_android](https://www.linkedin.com/posts/planet-a_planet-a-policy-navigator-activity-7113125993388601344-6xrc?utm_source=share&utm_medium=member_android)

2) <https://www.carbon-direct.com/insights/the-impact-of-the-inflation-reduction-act-one-year-later>

3) <https://www.burohappold.com/news/how-denmark-leads-the-way-in-decarbonising-the-construction-industry/>

# This is the 3<sup>rd</sup> Urban Tech report by 2150 x Dealroom

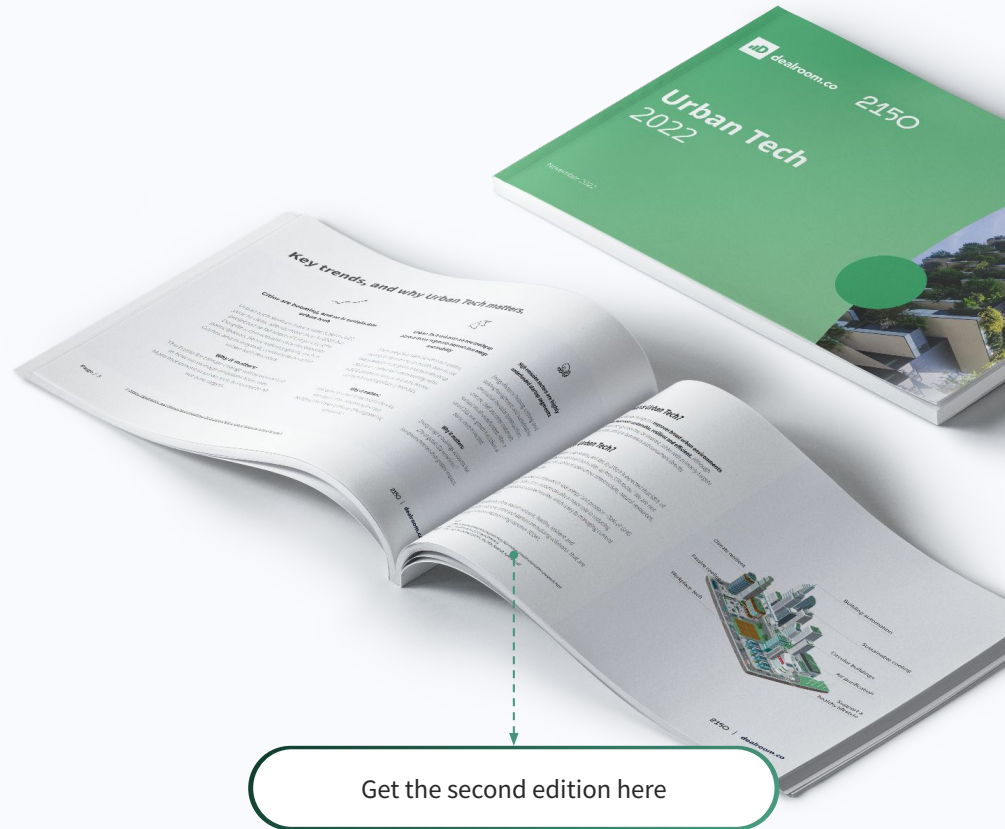
One year ago, 2150 and Dealroom launched the second edition of the Urban Tech report. We highlighted that the battle for climate change will be won or lost depending on how well we innovate within our cities and urban environments.

In the past two editions, we had highlighted how Urban Tech funding had grown in recent years, mainly driven by mobility and clean energy, while the building sectors kept remaining underfunded.

This has finally changed with green building startups attracting 3x more funding than 3 years ago, amid a broader market downturn strongly notable especially in more mature segments like mobility.

Key segments like sustainable steel and cement which were nascent back in 2021 when we started this journey, are now reaching large industrial scale and starting to breed unicorns.

This year we will investigate how we are standing on these topics and how things have been evolving, and cover emerging trends in construction project management, sustainable building construction materials & processes, building decarbonization and wildfire management.

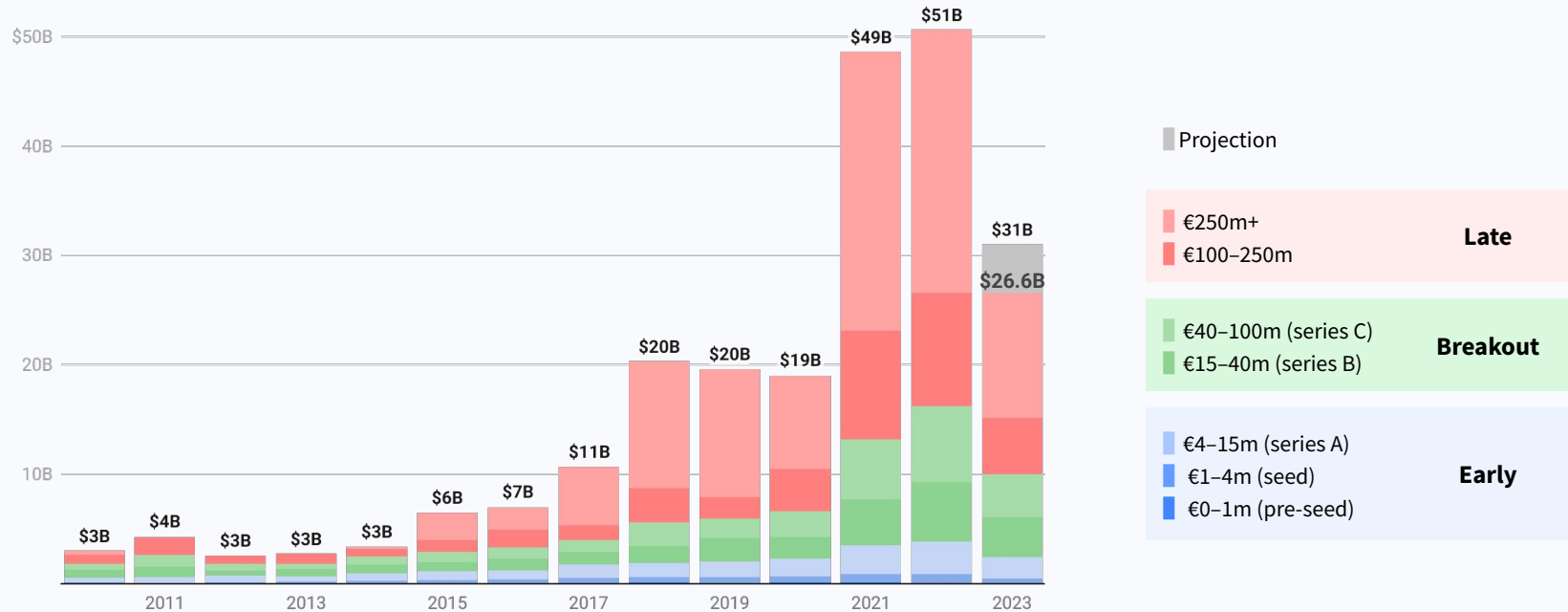


# 2 | Investment Trends & Unicorns

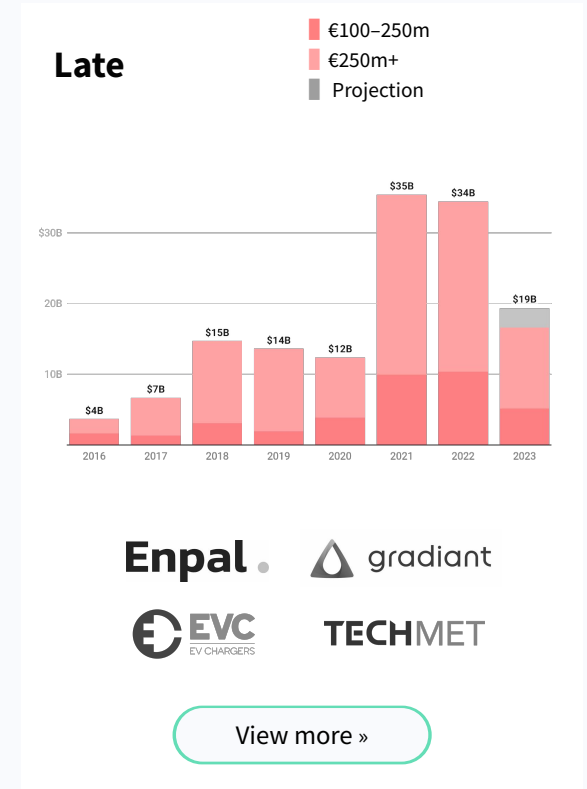
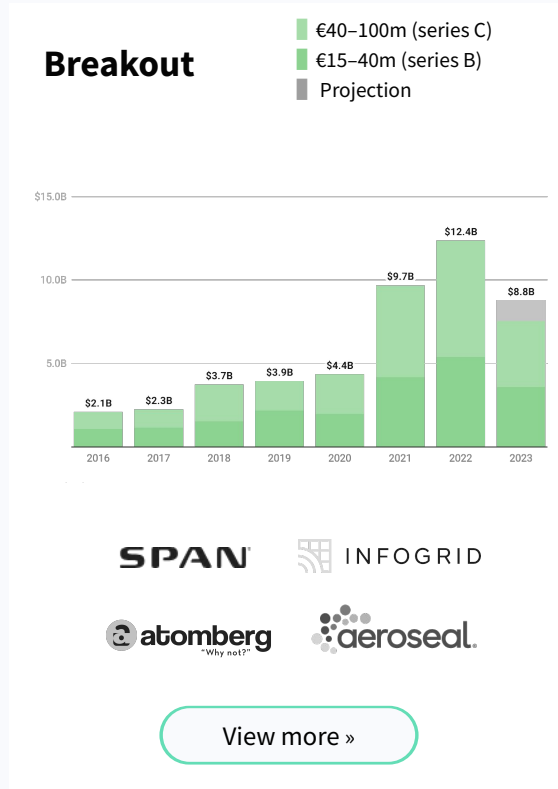
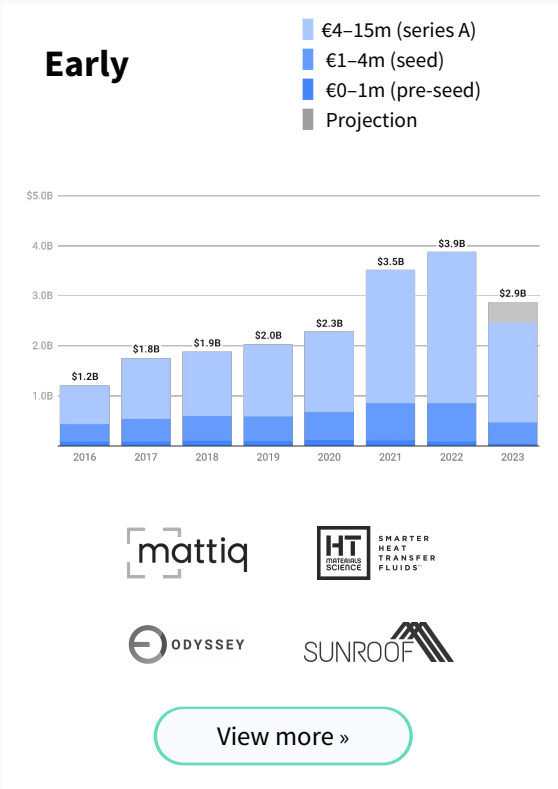
# Urban Tech startup funding has already surpassed 2020 levels this year, with \$26.6B raised so far in 2023, but the total is projected to be 39% lower than in 2022.

## VC investment into Urban Tech startups

[» view online](#)



# While every stage has experienced declines, late-stage rounds have especially dried up.

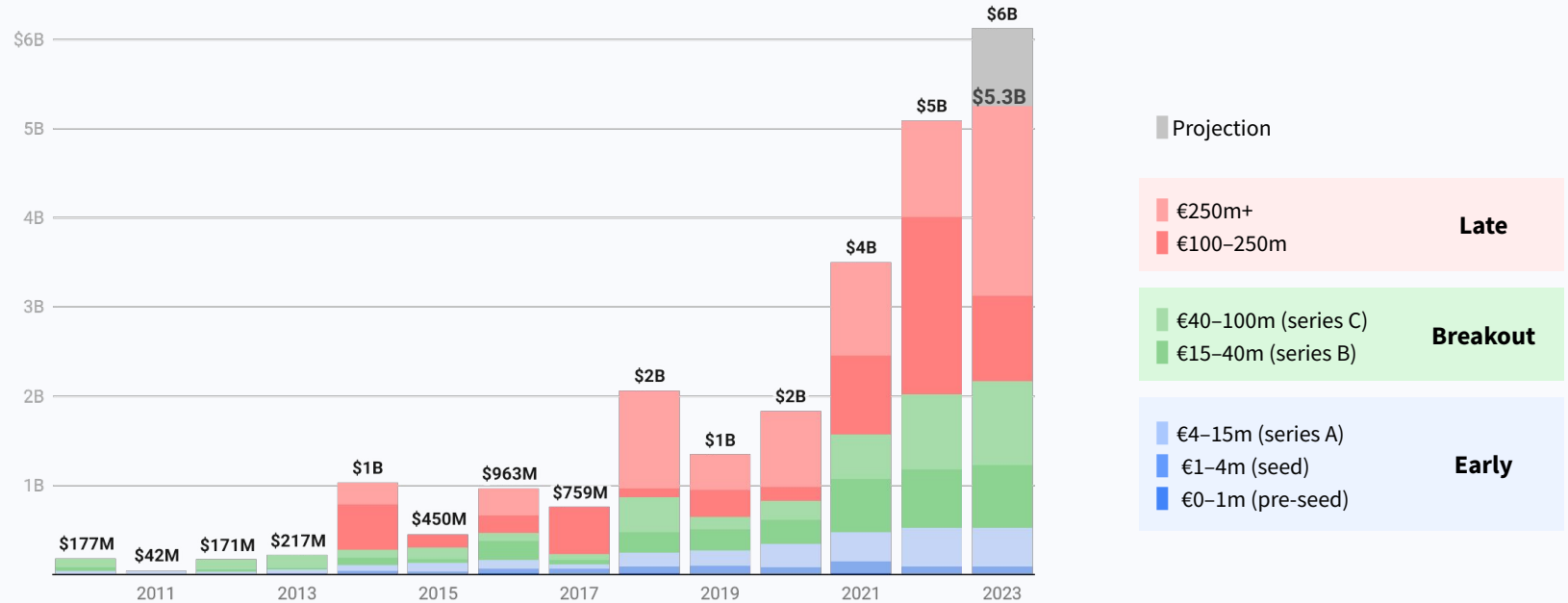




# Funding for green building startups is already at record high levels with \$5.3B in 2023, projected to grow over 3x in respect to 2020.

## VC investment into green buildings\* startups

[» view online](#)



# Most active sustainable urban tech venture funds.

## Pre-seed and seed

**LOWERCARBON**  
CAPITAL

Watershed, Electra, Woodoo

**PALE BLUE DOT**

Hived, Ember, Climate X



Ascend Elements, Gradient, Mojave Energy Systems

**<norrskén>**  
BOLDR, Lun, Material Evolution



Ecoworks, 42watt, Climate X

**FOUNDAMENTAL**

Mighty Buildings, Enter, Tangible



Material evolution, Beam up, Vizcab

## Early stage



Span, Woltair, Electric Hydrogen

**2150**

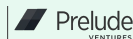
1KOMMA5, Carbon Cure Technologies, AeroSeal



HomeTree, HeatTransformers, Ceibo

**DEAMETER**  
PARTNERS

Plan A, Zeway, Pony



Boston Metal, LuxWall, Mill

**BUILDING VENTURES**

Measurabl, Blokable, enVerid



VARM, Span, Enter

## Late stage

**TEMASEK**

H2Green Steel, Ola Electric Mobility, Atomberg Technology



Carbon Upcycling Technologies, Gradient, AeroSeal



Ather Energy, Euler Motors, ABB E-mobility

**C▷PRICORN**  
INVESTMENT GROUP

Redwood Materials, Span, Magrathea Metals



Carbon Cure Technologies, Carbon Capture, Forum Mobility



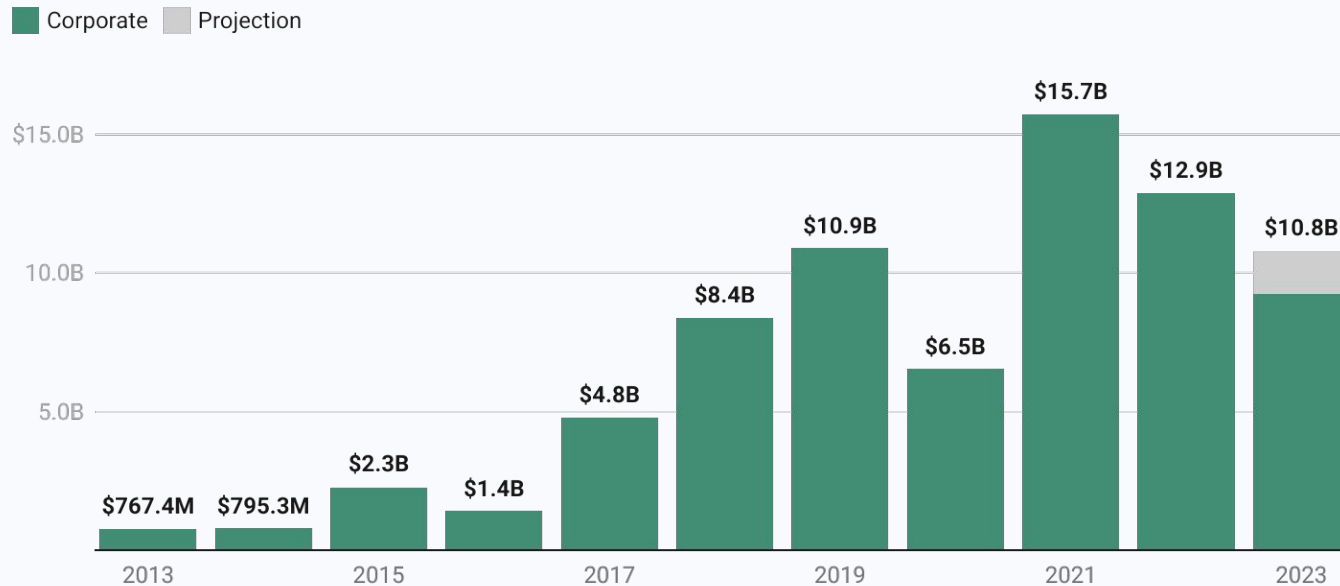
Enpal, Palmetto, UBQ Materials

**ALTOR**

Aira, H2Green Steel, Vianode

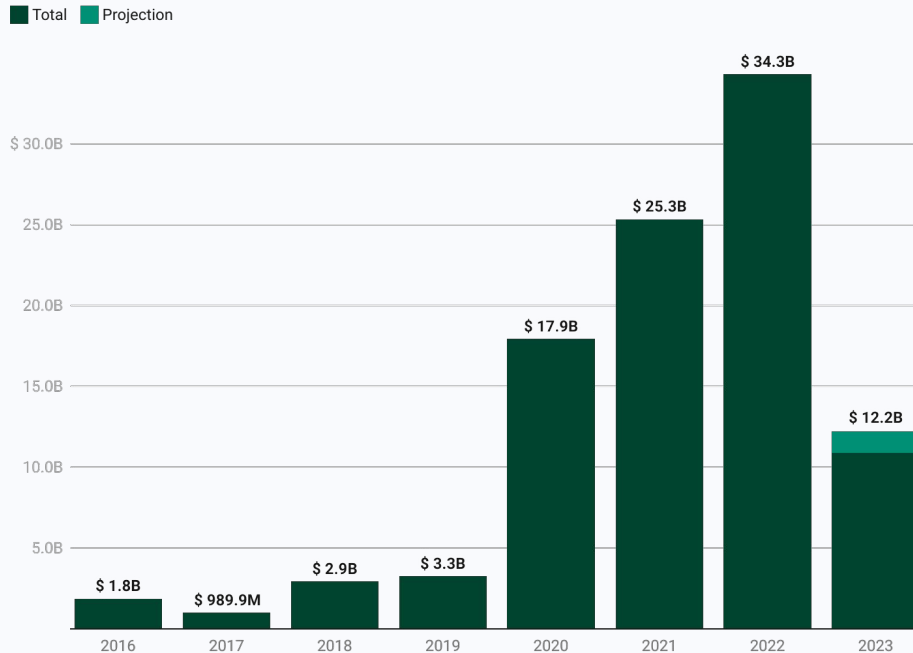
# While corporate funding has drastically increased over the past decade, 2023 levels are projected to decline by 16% compared to last year.

Corporate investment into Urban Tech startups  
[» view online](#)



# Climate Tech investors are projected to raise \$12.2B in 2023, a 64% decline compared to last year.

Amount of new Climate Tech funds raised by year



## Selected Climate Tech funds raised in 2023



## Newly launched fund in 2023



PLANETEER CAPITAL

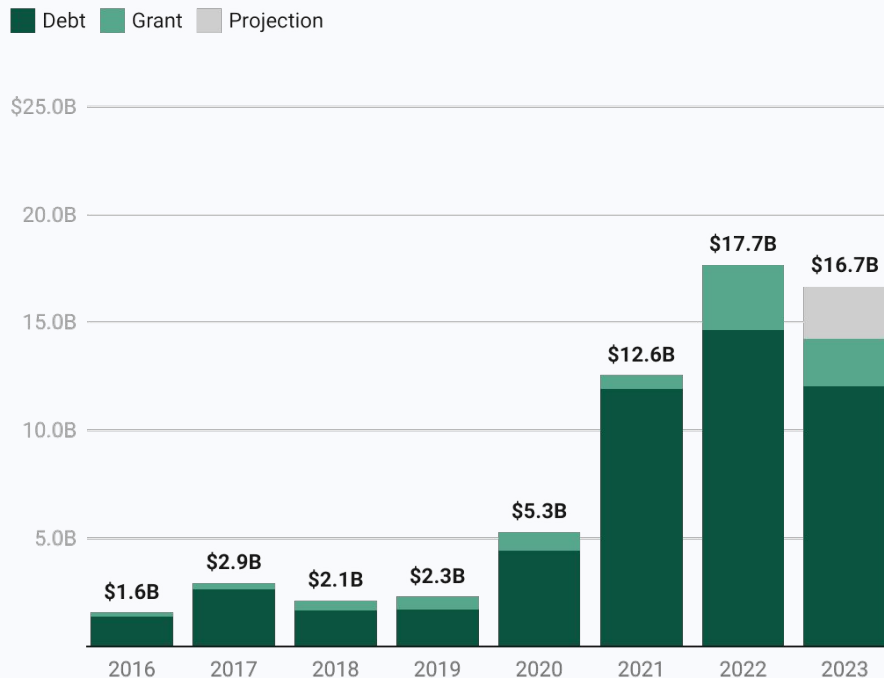


OVERVIEW



# Urban Tech startups are also raising massive amounts of non-dilutive capital, especially debt.

## Debt & Grant funding to Urban Tech startups



## Largest debt and grant financing to Urban Tech startups (2022-2023)

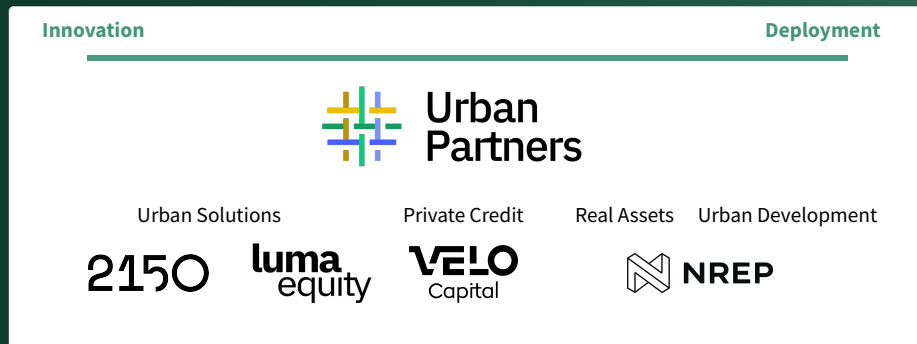
NAME	INVESTORS	MARKET	LOCATION
H2 Green Steel Largerscale steel producer based ...	KfW Societe Generale European Investment Bank UniCredit ING Group	energy clean energy	Stockholms kommun, Sweden
Britishvolt A pioneering battery technology d...	Titix Aldon	energy transportation vehicle production energy storage	Blyth, United Kingdom
voyah Gives the freedom to explore the ...	Bank of China Bank of Communications China Merchants Bank Industrial and Commercial Bank of China Agricultural Bank of China	transportation vehicle production	China
Redwood Materials Providing advanced technology a...	U.S. Department of Energy (DOE)	energy transportation energy storage waste solution	Carson City, United States
Enpal Germany's online solar provider	BlackRock UniCredit ING Group Primo Capital Group Infianity	energy energy services clean energy	Berlin, Germany
Kore Power Leading developer of battery cell t...	U.S. Department of Energy (DOE)	energy transportation energy storage clean energy	St. John's, Canada
Origis Energy Owns and operates solar photovol...	Societe Generale Sumitomo Mitsui Banking Corporation (SMBC Group) Truist First Citizens Bank Hefico	energy clean energy	Miami, United States
Verkor A company that promotes the dep...	France2030 Région Hauts-de-France Communauté urbaine de Dunkerque	energy transportation vehicle production energy storage	Grenoble, France
Verkor A company that promotes the dep...	European Investment Bank	energy transportation vehicle production energy storage	Grenoble, France

[View more »](#)

# The urban capital stack



Urban Partners is a platform of vision-aligned, differentiated, investment verticals shaped around urban problem solving. With four verticals and close to €20bn under management, we invest in assets, companies, technologies, and solutions. Across our platform, we share the same vision and values - and the aspiration to build the world's leading urban investment company:



“ Accelerating urbanization has put cities at the center of climate challenges, and it is where the climate battle will be won or lost.

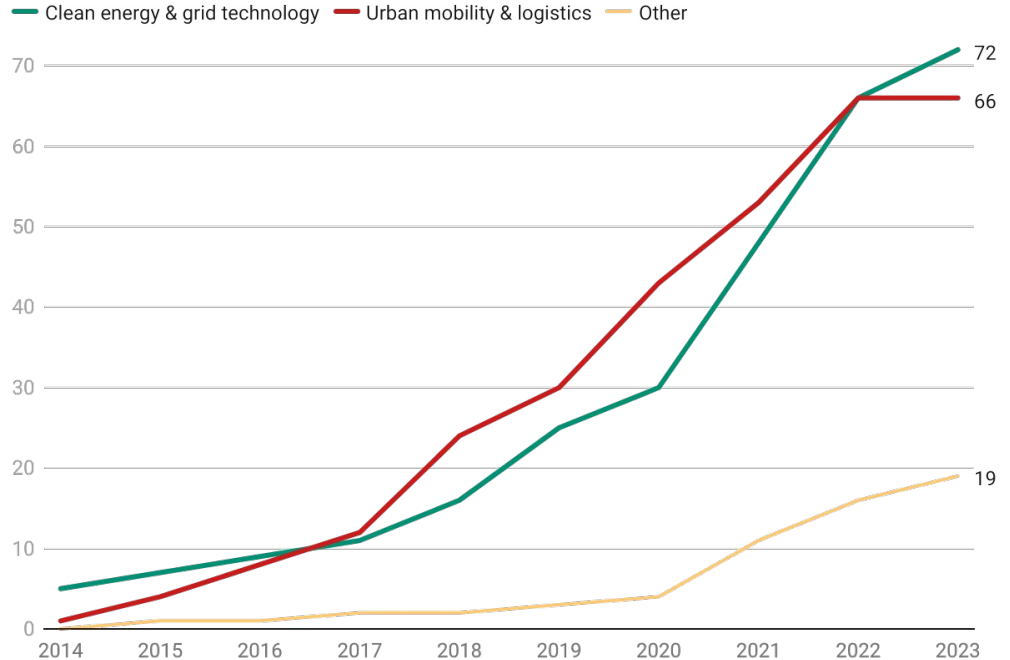
We must maximize collaboration among all stakeholders and jointly channel resources into scaling high-impact solutions. With Urban Partners, we aim to bridge the gap between people, cities, and capital, aligning their interests to drive systemic transformation. By leveraging our collective capabilities, we can identify, fund and support those technologies and business models that will catalyze climate mitigation and adaptation actions where it matters most - the urban landscapes where over half the world's population lives. Working together, we can build thriving resilient cities and a livable future for all."



**Jens Stender**  
Co-CEO and Partner  
at **Urban Partners**

**138 of the 157 Urban Tech unicorns are operating in either clean energy or mobility, but other categories have been emerging since 2020.**

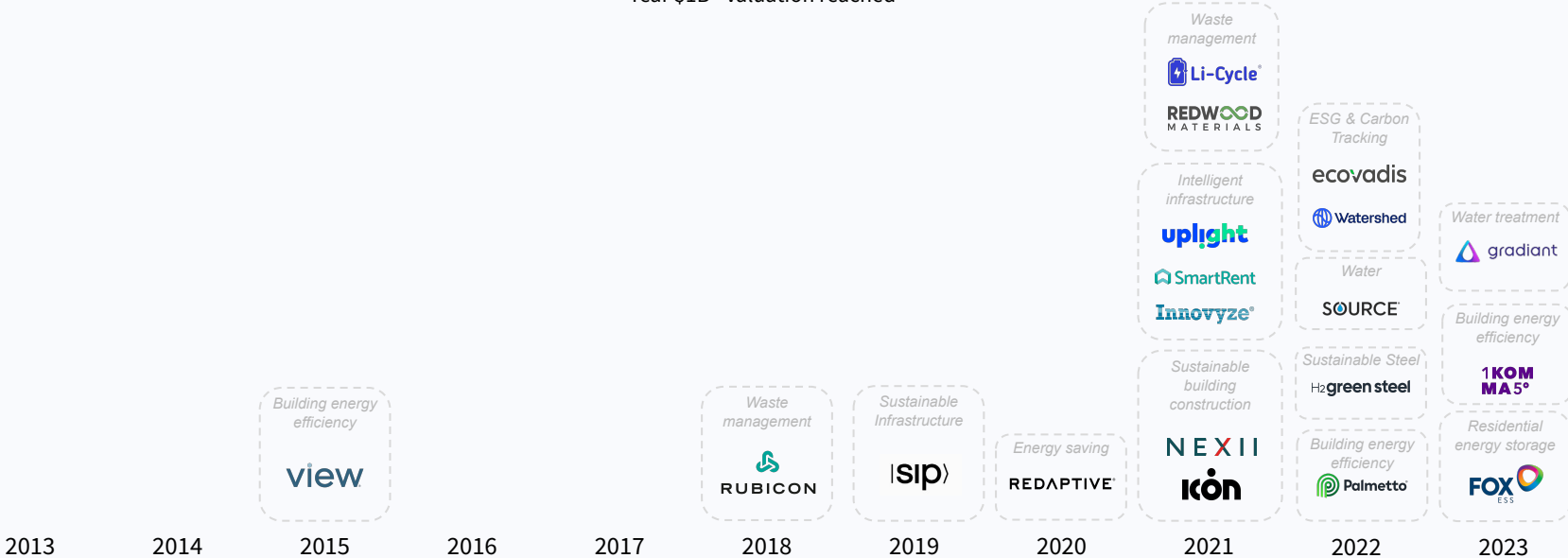
**Number of Urban Tech unicorn per segment (cumulative)**



# The biggest subcategories of Urban Tech unicorns are sustainable building construction and building energy efficiency companies.

## Urban Tech unicorns per segment, excluding clean energy and urban mobility

Year \$1B+ valuation reached





# 3



## Enable

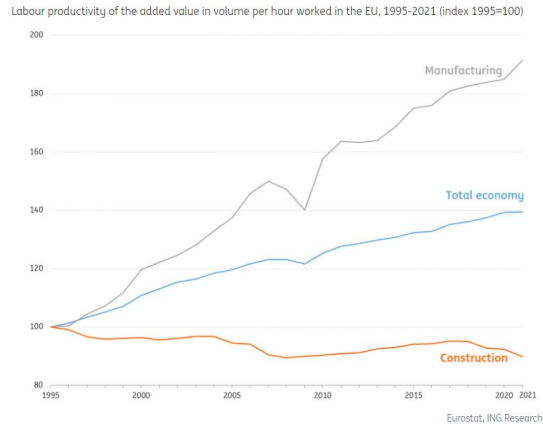
Enabling infrastructure technologies and platforms that allow urban areas to scale sustainably and resiliently.

# Construction is lagging behind with declining productivity, rising costs and traditional tools. This opens the opportunity for startups to disrupt the construction tech landscape.

## Decline in construction labour productivity

Since 1995, construction labour productivity has stagnated, while it nearly doubled for manufacturing.<sup>1</sup>

### Construction labour productivity lags behind



## Rising costs

From 2012 to 2020, the average price increase of production (value-added share) in European construction was 2.3% per year compared to 1.0% in manufacturing. In the preceding period (2002-11), the price difference was even greater.

**The construction sector still rely on traditional tools, lacking in digital transformation.**

According to a recent survey, an astounding **85%** of respondents in the European construction sector still lean on **Excel for short-term planning**<sup>2</sup>.

To address this productivity gap, a wave of startups has emerged in the construction tech landscape, aiming to disrupt traditional practices. Construction Tech involves the application of new digital technologies across three key construction phases: **development, planning, and building.**

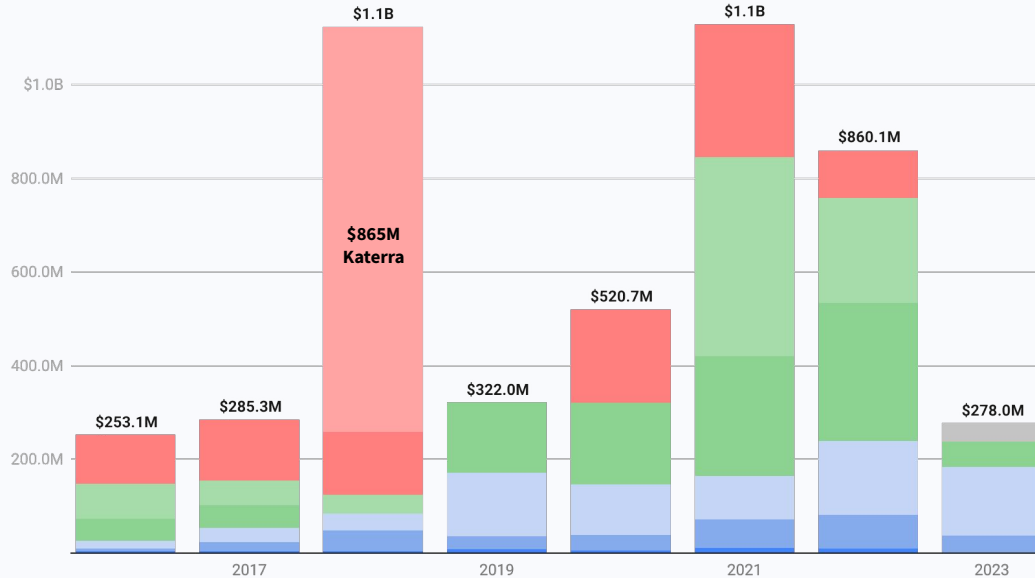
Typically software-based, **Construction Tech companies aim to enhance innovation in the digitization and sustainability of the sector.** These companies are indispensable for several reasons, including enabling seamless collaboration, real-time updates, maintaining an audit trail, automating processes to reduce errors, and being tailored specifically for the unique needs of the construction industry—all contributing to ensuring quality and timely project delivery.

# VC funding for construction SaaS startups peaked in 2021, investments have plummeted this year, expected to decrease 68% from last year.

## VC Investment into SaaS x construction startups

[» view online](#)

■ \$0-1m (pre seed) 
 ■ \$1-4m (seed) 
 ■ \$4-15m (series A) 
 ■ \$15-40m (Series B) 
 ■ \$40-100m (Series C) 
 ■ \$100-250m (Mega rounds) 
 ■ \$250m+ (Mega+) 
 ■ Projection



## Selected project management startups for construction tech



# 4



## Build

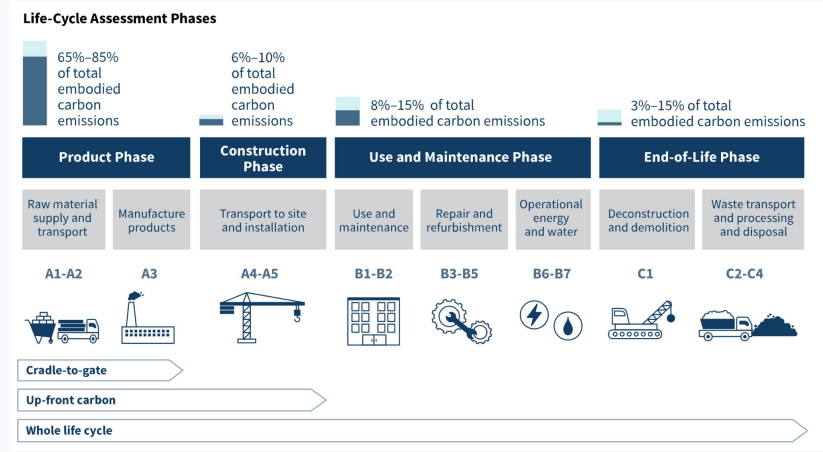
How we build including planning, materials, construction and processes.

# Embodied carbon accounts for almost a third of building sector emissions, mainly driven by construction materials (above all cement and steel).

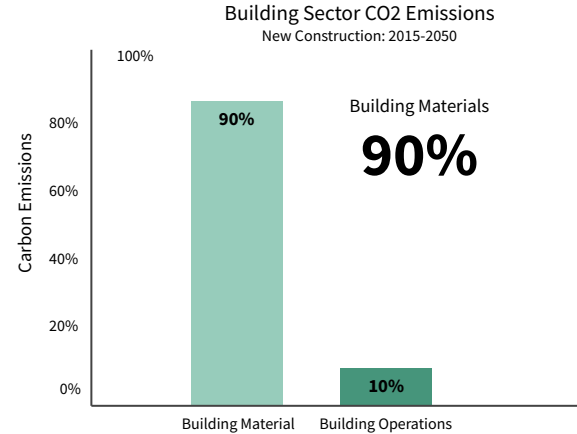
## Embodied carbon is key to building decarbonization.

Globally, **embodied carbon** is responsible for **11% of annual GHG emissions and 28% of building sector emissions**<sup>(1)</sup>.

As operational energy efficiency increases, the impact of embodied carbon emissions in buildings will become increasingly significant. Unless our construction methods change, building materials will cause emissions of >150 GtCO<sub>2</sub> between 2020 and 2050, eating up 30% of our remaining 1.5°C-compatible CO<sub>2</sub> budget.



## The main driver of embodied carbon emissions are building materials<sup>(3)</sup>.



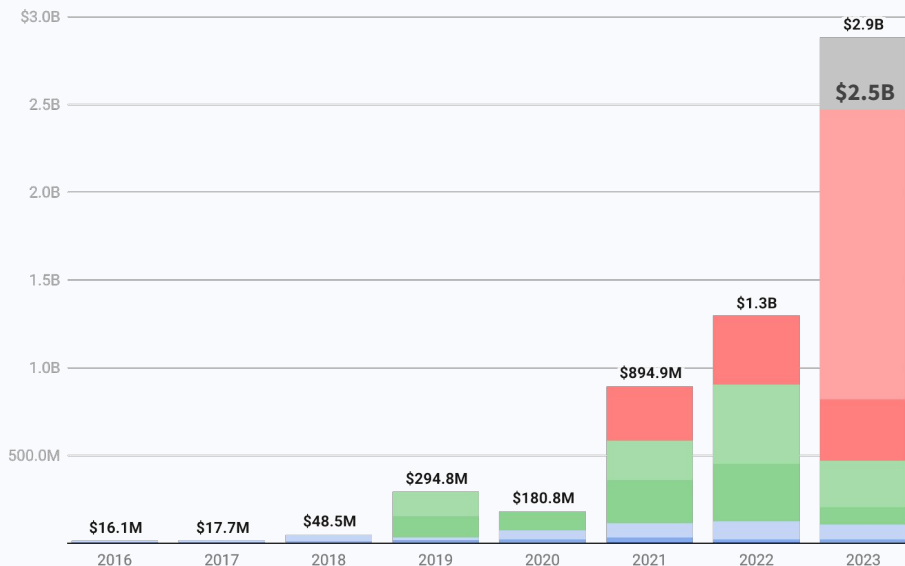
**Cement** in particular is the most abundant human-made material in the world, cement production creates **~7% of the world's CO<sub>2</sub> emissions** and is the largest contributor to embodied carbon in the built environment.

# Sustainable building construction startups have raised \$2.5B in 2023, by far more than ever before, even if vastly led by H2 Green Steel \$1.5B megaround.

## Investment into sustainable building construction startups

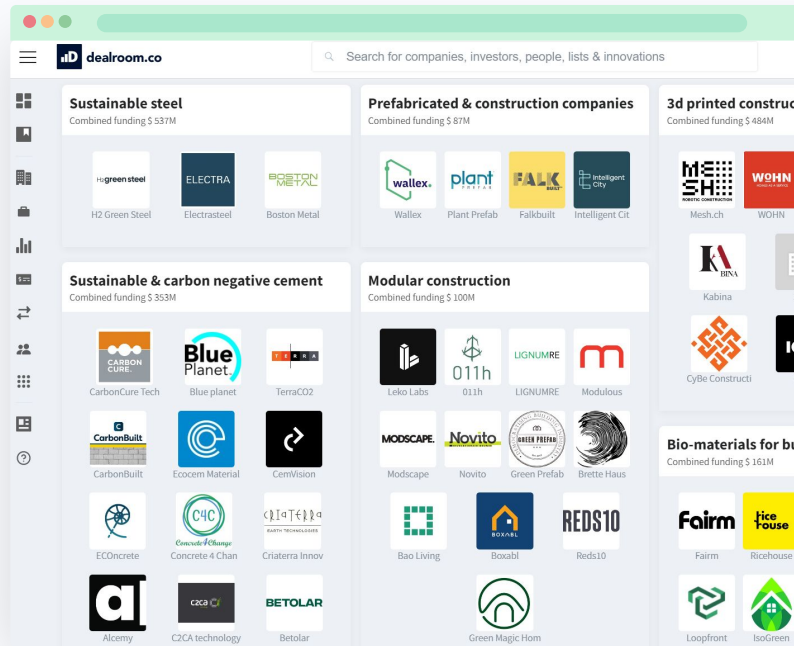
[» view online](#)

■ \$0-1m (pre seed) 
 ■ \$1-4m (seed) 
 ■ \$4-15m (series A) 
 ■ \$15-40m (Series B) 
 ■ \$40-100m (Series C) 
 ■ \$100-250m (Mega rounds) 
 ■ \$250m+ (Mega+) 
 ■ Projection



## Explore 160+ sustainable building construction startups

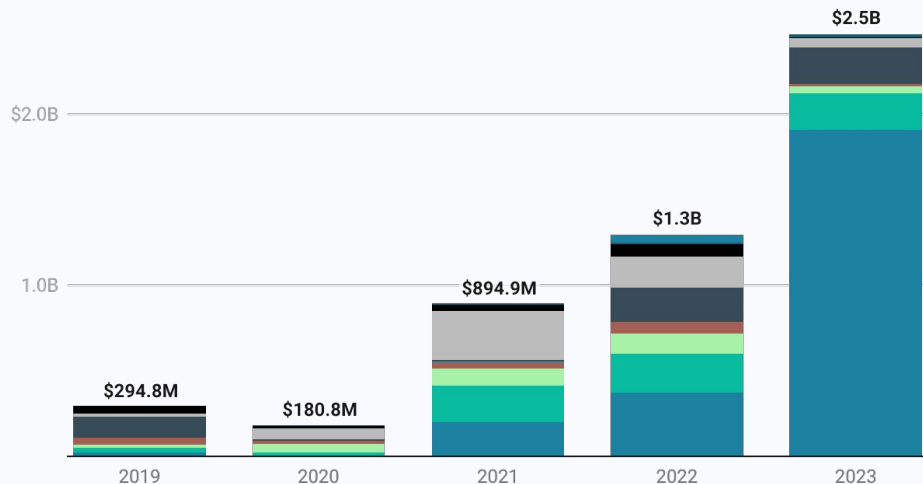
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# The rise in funding for sustainable building construction is mainly coming from materials innovation such as sustainable steel, cement and biomaterials.

## Investment into sustainable building construction startups

■ Sustainable steel 
 ■ Sustainable & carbon negative cement 
 ■ Bio-materials for buildings 
 ■ Wood for buildings 
 ■ Marketplace for green, sustainable building materials and products 
 ■ Modular construction 
 ■ 3d printed construction 
 ■ Prefabricated & construction companies 
 ■ software for greener building construction planning 
 ■ Decarbonizing construction site operations



## Notable rounds in sustainable building construction in 2023

Startup	Funding round	Focus
 H2green steel	€1.5B Growth Equity VC	Green steel
 BOSTON METAL	\$262M Series C	Green steel
 GROPYUS	€100M Series B	Modular construction
 TopHat	£70M Growth Equity VC	Modular construction
 CARBON CURE	\$80M Late VC	Sustainable cement
 MIGHTY BUILDINGS	\$53M Late VC	3d printed construction
 Sublime Systems	\$40M Series A	Sustainable cement

# 5



## Operate

Sensors and platforms to monitor, control and optimize buildings, cities, and streets.

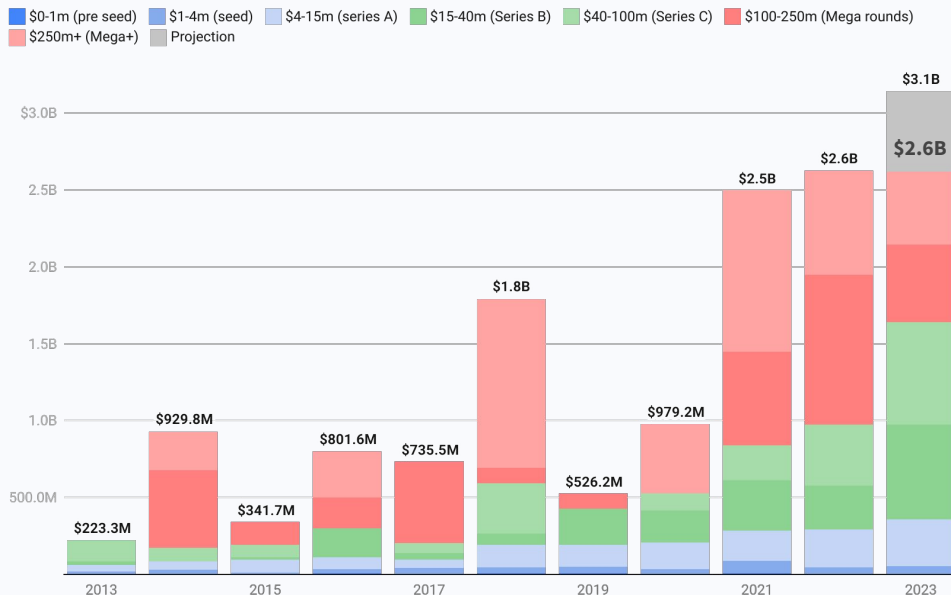




# Investment in building operation decarbonization have already raised \$2.6B in 2023, on track for a record of over \$3B.

## Investment into building operation decarbonization

[» view online](#)



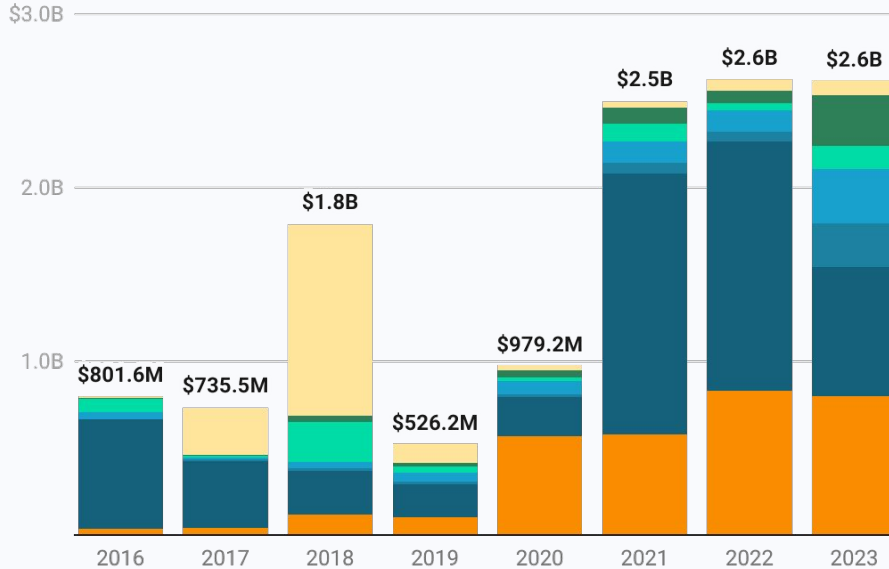
## Notable rounds in building operation decarbonization in 2023.

Startup	Funding round	Focus
<b>1KOM MA 5°</b>	€430M Series B	Building energy management
<b>Enpal</b>	€215M Series D	Residential solar installation
<b>Palmetto</b>	\$150M Growth Equity VC	SaaS for end-to-end residential solar operations.
<b>accenta.</b>	€108M Late VC	Heat Storage
<b>SPAN</b>	\$96M Series B	Building energy management
<b>AIRA</b>	€87M Late VC	Heat pumps
<b>Kelvin</b>	\$30M Series A	Smart heating retrofit

# Building energy management has attracted the most funding, followed by residential solar. Heat pumps and energy retrofit have also shown strong growth.

## Investment into building energy efficiency startups

■ Building energy management 
 ■ Residential solar 
 ■ Heat pumps 
 ■ Air cooling and heating tech 
 ■ SaaS and IoT for heating and cooling 
 ■ Energy retrofit 
 ■ Other energy efficiency



## Explore 300+ Building energy efficiency startups

[» view online](#)

The screenshot displays a web interface for exploring startups. It features a search bar at the top and several categorized grids of startup logos. The categories and their combined funding are:

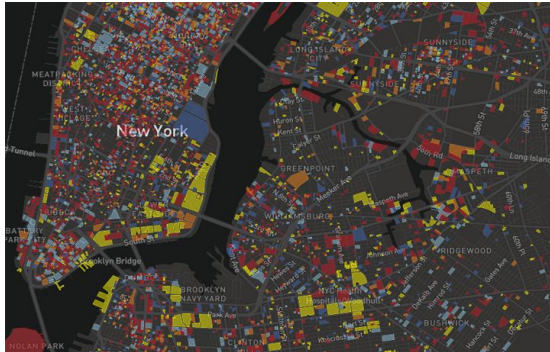
- Energy retrofit**: Combined funding \$ 1614M. Includes startups like Sealed, Aeroseal, Noven, Audette, Helios Exchange, Retrolux, Bright Power, INOVUS, Ecworks, Settle, De Energiebespa, Bureau Voor Ver, Flair IoT, Measurable.ener, ACS Buildings, Infigrid, and PowerScout.
- SaaS and IoT for heating**: Combined funding \$ 375M. Includes startups like tado, ecobee, Switchee, nest, Nrlze, HiberSense, eCoozy, Vilisto, and Radiator Labs.
- Efficient air cooling and heating**: Combined funding \$ 352M. Includes startups like Gradient Comfort, DynamicAirCooli, M2 Thermal Solu, HT Materials Sc, Oxygen8, transaera, TREAU, Arkitech, mistEX, Mistbox, Coolerado, MagnoTherm Solu, and BioC-POWER.
- SaaS and IoT for cooling**: Combined funding \$ 227M. Includes startups like BrainBox AI, Encycle Corpora, BeeByte, Samsibo, Envairo, Cielo Wigle Inc, NATURE, and INCUBE.
- Smart home energy management & energv reduction apps**: Includes startups like Degree-n and Hyperborean.

## Startups are tackling old buildings energy efficiency, supported by increasing building regulation.

Retrofitting old buildings is expensive, therefore we need innovative ways to make buildings more efficient.

**Local Law 97 (LL97) in NYC** puts carbon caps and reductions on buildings over 25k sq ft.

Affordable Housing Buildings that include affordable and rent-regulated housing are not exempt from the requirements of Local Law 97 but may be treated differently. Starting in 2024, many aspects of the law will phase in over time. Carbon caps will become more stringent over a series of compliance periods through 2049. In 2050, all buildings will have to meet zero emissions requirements.



ENERGY EFFICIENCY SCORE
A: ENERGY STAR RATING $\geq$ 85
B: ENERGY STAR RATING $\geq$ 70 AND $<$ 85
C: ENERGY STAR RATING $\geq$ 55 AND $<$ 70
D: ENERGY STAR RATING $<$ 55
F: REQUIRED BENCHMARKING INFORMATION NOT SUBMITTED

Map of New York building energy efficiency.

Most building in New York still rank low on energy efficiency rating.

Source: <https://www.nyc.gov/>

“Of the energy consumed in U.S. multi-family buildings, approximately 25% is used for space heating.”

“New York City alone has over 3.5 million apartments heated by inefficient, central boiler-powered steam radiators. Kelvin's non-invasive approach delivers substantial energy savings and emissions reductions, avoids the need to retrofit the underlying infrastructures completely, and sets up the building to fully electrify at boiler end-of-life. This empowers building owners to take control of these old radiators and unlocks decarbonization benefits for the millions of older buildings heated by legacy steam systems.”

**Marshall Cox**  
Founder and CEO  
at Kelvin



# 6 | Experience

Sensors and platforms to monitor, control and optimize buildings, cities, and streets.

# Wildfires is one of the biggest threats to the security of cities and their development.

## The rising risk and impact of wildfires

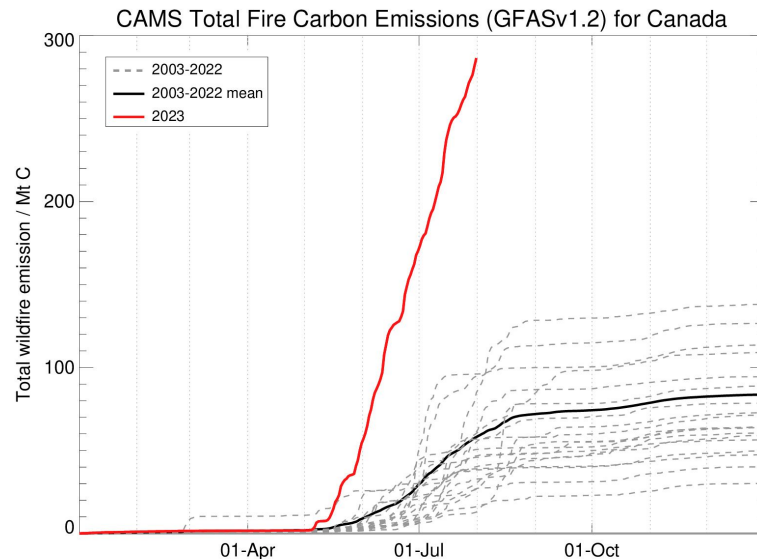
Forest fires now result in 3M more hectares of tree cover loss per year compared to 2001, and accounted for more than one-quarter of all tree cover loss over the past 20 years. In fact, only in the period between January and July 2023, Canada saw 9.5M hectares of its land wiped, the equivalent surface area of Portugal <sup>1</sup>.

Wildfires can also make cities unlivable, drastically worsening **air quality**. As a result of Canadian wildfires, New York City experienced the worst day of air pollution on US record <sup>2</sup>.

The wildfire crisis is also becoming an **insurance crisis**. In 2023 in the US, wildfires have already caused over \$1B in damages. As a result insurers are now refusing to offer insurance coverage in certain high-risk areas <sup>3</sup>.

Wildfires not only disrupts the lives and communities exposed to it, but also leaves a lasting impact on the environment. This year, **Canada** experienced the widespread effects of wildfires, resulting in a significant aftermath: a staggering **2 billion tonnes of CO2** were released, roughly **tripling the entire country's annual carbon footprint** <sup>4</sup>. To put it in perspective, considering emissions only from January 1st to July 31st, the amount released into the atmosphere equals the annual emissions from over **285 coal-fired power plants** <sup>5</sup>.

## 2023 Canada wildfires emissions have already doubled previous annual record



PROGRAMME OF  
THE EUROPEAN UNION

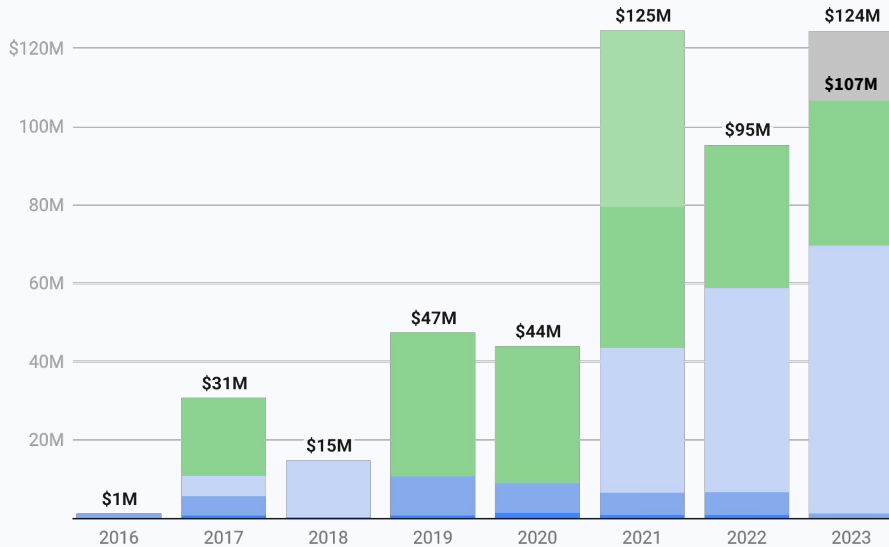


# Investments in wildfire startups have grown 7x since 2018 and projected to match all-time-high 2021 levels by years end.

## Investment into wildfire management startups

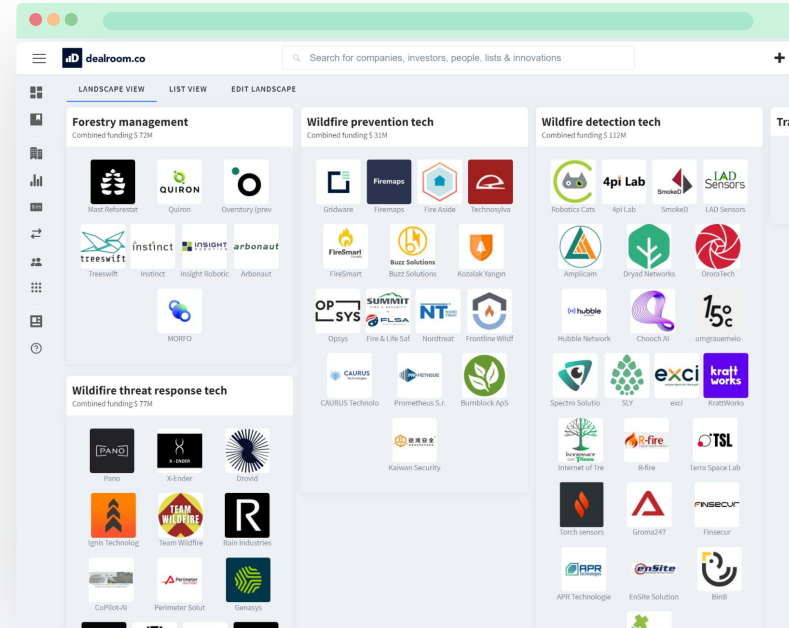
[» view online](#)

■ \$0-1m (pre seed) 
 ■ \$1-4m (seed) 
 ■ \$4-15m (series A) 
 ■ \$15-40m (Series B) 
 ■ \$40-100m (Series C) 
 ■ \$100-250m (Mega rounds) 
 ■ \$250m+ (Mega+) 
 ■ Projection



## Explore 70+ wildfire management startups

[» view online](#)



# Wildfire detection tech has attracted the most funding across wildfire startups.

## A lot more funding has been directed to climate catastrophe insurance and air quality.

### Prevention

#### Forestry management

Use of satellite imaging, drones and other sensors to acquire data and plan forest management, as well as electric lines monitoring

Combined funding: \$72M

Examples:

 **overstory**

 **Mast**  
REFORESTATION

 **treeswift**

[View more »](#)

### Real-time

#### Wildfire detection tech

Using satellite & imaging or gas sensors & IoT networks to fastly detect wildfires

Combined funding: \$112M

Examples:

 **ORORA**  
TECHNOLOGIES

 **chooch**

 **hubble**  
NETWORK

[View more »](#)

#### Wildfire threat response

Tactical and operational management software for firefighters, as well as tech for firefighting such as drones

Combined funding: \$77M

Examples:

 **PANO**

**Rain**

 **DH**  
DRONE HOPPER

[View more »](#)

### Post-event

#### Climate catastrophe insurance\*

Insurance coverage for extreme-weather events such as wildfire, flooding and storms. Mostly data providers, risk assessment or parametric insurance MGAs.

Combined funding: \$1.1B

Examples:

 **DESCARTES**

 **zesty<sup>AI</sup>**

 **UNDERSTORY**

[View more »](#)

#### Air quality monitoring & treatment\*

Sensors and data analysis solutions to monitor air quality, as well as devices for the purification of air (especially for indoor spaces).

Combined funding: \$790M

Examples:

 **rzero**

 **enVerid**  
Energy savings. Air quality.

 **MOLEKULE**









[View more »](#)



# Top 100 urban tech startups to watch based on Dealroom signal.

We've ranked the top 100 urban tech startups to watch based on **Dealroom Signal**: a powerful algorithm helping VCs, Corporates and Governments find the most promising up and coming startups.

» Top 100 Urban Tech Startups to Watch

NAME	DEALROOM SIGNAL	MARKET	TYPE	GROWTH 12 months growth	LAUNCH DATE
 <b>Gayam Motor Works</b> Gayam Motor Works designs, man...	90	B2B, B2C transportation vehicle production	selling own inventory manufacturing	86%	May 2010
 <b>unu</b> ★ 🚩 Offers a battery-powered, smart el...	90	B2C transportation vehicle production	deep tech hardware iot internetofthings selling own inventory marketplace & ecommerce	140%	Jan 2013
 <b>Electra</b> ★ 🚩 Decarbonizing ironmaking for gree...	86	B2B energy	deep tech hardware selling own inventory manufacturing	114%	2020
 <b>FENIX</b> ★ 🚩 Unleashing urban potential throu...	82	B2C transportation vehicle production mobility	selling own inventory marketplace & ecommerce manufacturing	185%	Jul 2020
 <b>Circuit - The Free Ride</b> ★ 🚩 An all-electric, on-demand, local s...	81	B2B, B2C transportation mobility	commission marketplace & ecommerce	63%	Apr 2011
 <b>BeeBryte</b> ★ 🚩 ❤️ Automated HVAC-R control & Chill...	81	B2B real estate energy energy efficiency	machine learning iot internetofthings artificial intelligence deep tech commission	72%	Dec 2015
 <b>The Bike Club</b> ★ 🚩 Platform that offers to pay monthl...	79	B2C kids transportation mobility search, buy & rent	subscription marketplace & ecommerce	113%	Apr 2016
 <b>Thermosphr</b> 🚩 Innovative thermal management s...	78	B2B real estate energy clean energy	saas	57%	Jan 2020

# Impact is to have sustainability at the core.

In this report, an impact startup is a company that addresses one or more UN Sustainable Development Goal (SDGs) at the core of its business and the potential to scale. Our litmus test: if you remove the impact, you also remove the business.

Impact is often confused with ESGs, while the two concepts have strong differences.

ESGs look at improving financial returns by reducing the risk of the investment, but do not factor in positive or negative impact on the world (inside-in view).

Impact instead look to solve societal challenges and do good for the world (inside-out view)

Our full taxonomy is available at [this link](#).

**In this report we examined over 11,000 global VC-backed impact startups.**

**Impact and ESGs are two vastly different things with little overlap.**

**ESGs do not necessarily lead to positive impact on the world.**



## Impact

DOING GOOD FOR THE WORLD  
(STAKEHOLDERS)



## Environmental, Social and Corporate Governance (ESG)

REDUCING RISK FOR INVESTORS  
(SHAREHOLDERS)

# Projected Impact Method

2150 measures the sustainability impact of its investments and portfolio. This analysis considers the current and potential future impacts from a company's and/or its products' ability to have quantifiable benefits on the climate and environment. These calculations speak to the 2150 Impact Principles embedded in our Impact Score, as well as enable us to articulate and report the impact of our companies and portfolio.

We frame our impact calculations within a selection of Key Performance Indicators (KPI) and the Sustainable Development Goals to have a common framework for assessing benefits. These KPIs cover both common metrics such as climate mitigation, as well as more company specific outcomes such a resilience and pollution benefits. Working with companies and industry experts, we model the scale of impact to at least 2040 for each investment.

## 2150 key performance indicators

### GHG emissions savings

Tonnes CO2 eq. / yr

### Energy savings

GJ / yr

### Renewable energy generated

MWh / yr

### Water savings

m<sup>3</sup> / yr

### Resource savings

Tonnes / yr

### Increased human health

QALY

### Reduced weather disruption

Days / yr

### Reduced weather damage

%

### PM air pollution reduction

Tonnes PM / yr

### NOx air pollution reduction

Tonnes NOx / yr

### SOx air pollution reduction

Tonnes SOx / yr

### Individuals benefiting

Individuals

# Methodology and definitions.

## Startups, scaleups, grownups and tech

Companies designed to grow fast. Generally, such companies are VC-investable businesses. Sometimes they can become very big (e.g. \$1B+ valuation).

When startups are successful, they develop into scaleups (>50 people), grownups (>500 people) and result in big companies, like Arrival or Northvolt.

Only companies founded since 1990 are included in this report.

Glossary & Definitions

## Venture capital investment

Investment numbers refer to rounds such as Seed, Series A, B, C, ... late stage, and growth equity rounds.

Venture capital investment figures exclude debt or other non-equity funding, lending capital, grants and ICOs.

Buyouts, M&A, secondary rounds, and IPOs are treated as exits: excluded from funding data.

Investment rounds are sourced from public disclosures including press releases, news, filings and verified user-submitted information.

## Impact

In this report, an impact startup is a company that addresses one or more UN Sustainable Development Goal (SDGs) at the core of its business and the potential to scale. Our litmus test: if you remove the impact, you also remove the business.

Urban tech

## Underlying data

Dealroom's proprietary database and software aggregate data comes from multiple sources: harvesting public information, user-submitted data verified by Dealroom, data engineering. All data is verified and curated with an extensive manual process.

Most underlying data from the report is available online via <https://dealroom.co/>

For more info please visit [dealroom.co](https://dealroom.co) or contact [support@dealroom.co](mailto:support@dealroom.co)



2150