

Munich | April 17, 2024 | Sustainability Circle

Building an industrial implementation alliance for the circular economy

//

Agenda

1. UnternehmerTUM
2. CIRCULAR REPUBLIC
3. Diskussion Kooperationsmöglichkeiten





UNTER
NEHMER
TUM

WE TURN VISIONS
INTO VALUE

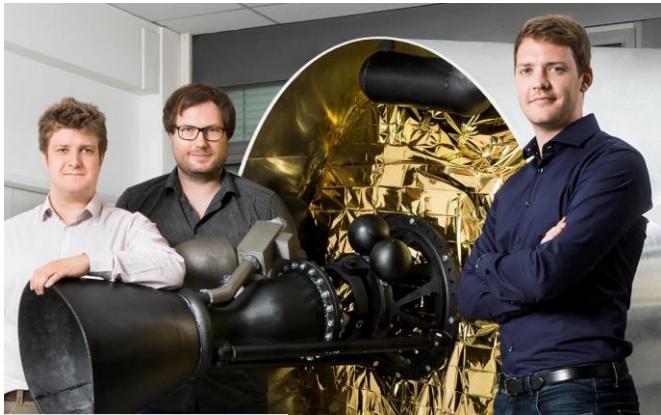
Building new tech businesses together to shape the world we want to live in.

At UnternehmerTUM, visions turn into value. Our teams empower innovation enthusiasts to take entrepreneurial action. Together with start-ups and established companies, we drive tech ventures forward - from first idea to market leadership.

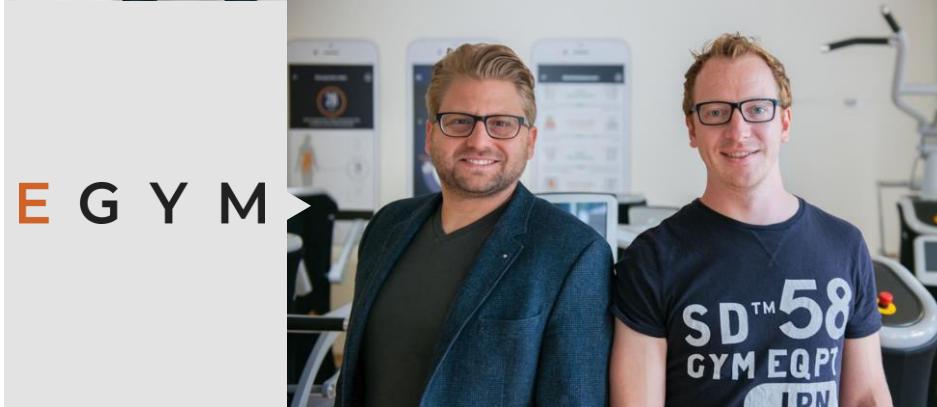
In collaboration with the Technical University of Munich (TUM) and entrepreneur Susanne Klatten, we've been promoting future-forward start-ups such as Celonis, Konux, Lilium, inveox, and Isar Aerospace since 2002.



Our Start-up Success Stories



Our Start-up Success Stories



EGYM

tado°



Personio



FINN

Success Stories with Family Businesses and Our Corporate Partners

NEMETSCHKE
GROUP



FESTO



 **BOSCH**
Invented for life

wanzl



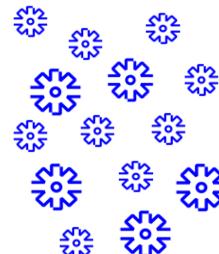
WACKER



Review 2023

- Founded in 2002, owned by entrepreneur Susanne Klatten
- Largest European entrepreneurship center: From first idea to IPO
- Part of TUM - Technical University of Munich, Europe's number one technical university
- Biggest open B2B start-up platform with corporate partners like BMW, DATEV, E.ON SE, FESTO, Infineon, Linde, SAP, Siemens
- High performance VC fund with EUR 386 million under management - cooperation with leading global VCs like atomico, Burda Principal Investments, GA, Lakestar and NEA
- Average annual growth rate >25% (output, sales and employees)

INNOVATION

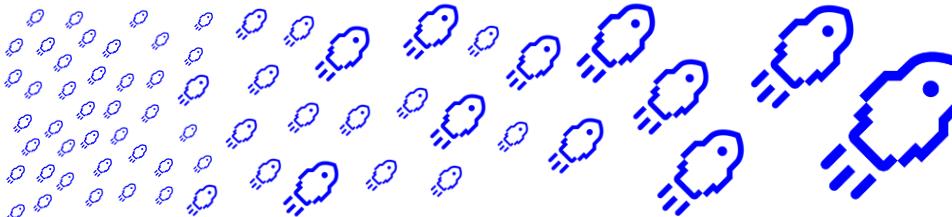


Recognize opportunities and develop business models:
>150
corporate innovation partners in 2023



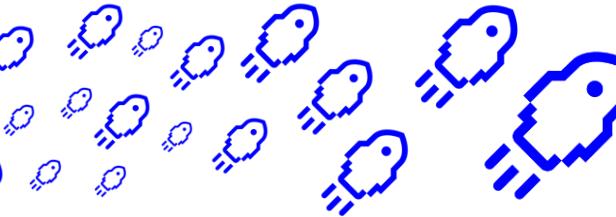
Facilitate innovation and scale businesses:
>350
business creation projects and active company partners in 2023

ENTREPRENEURSHIP



Entrepreneurship and tech education:

>11,000
participants in 2023



Start-up development and acceleration:

>720
supported start-ups in 2023



VC and start-up financing:

2.2
billion US dollar in 2023



We are
honored
to be
1st place



UNTER
NEHMER
TUM

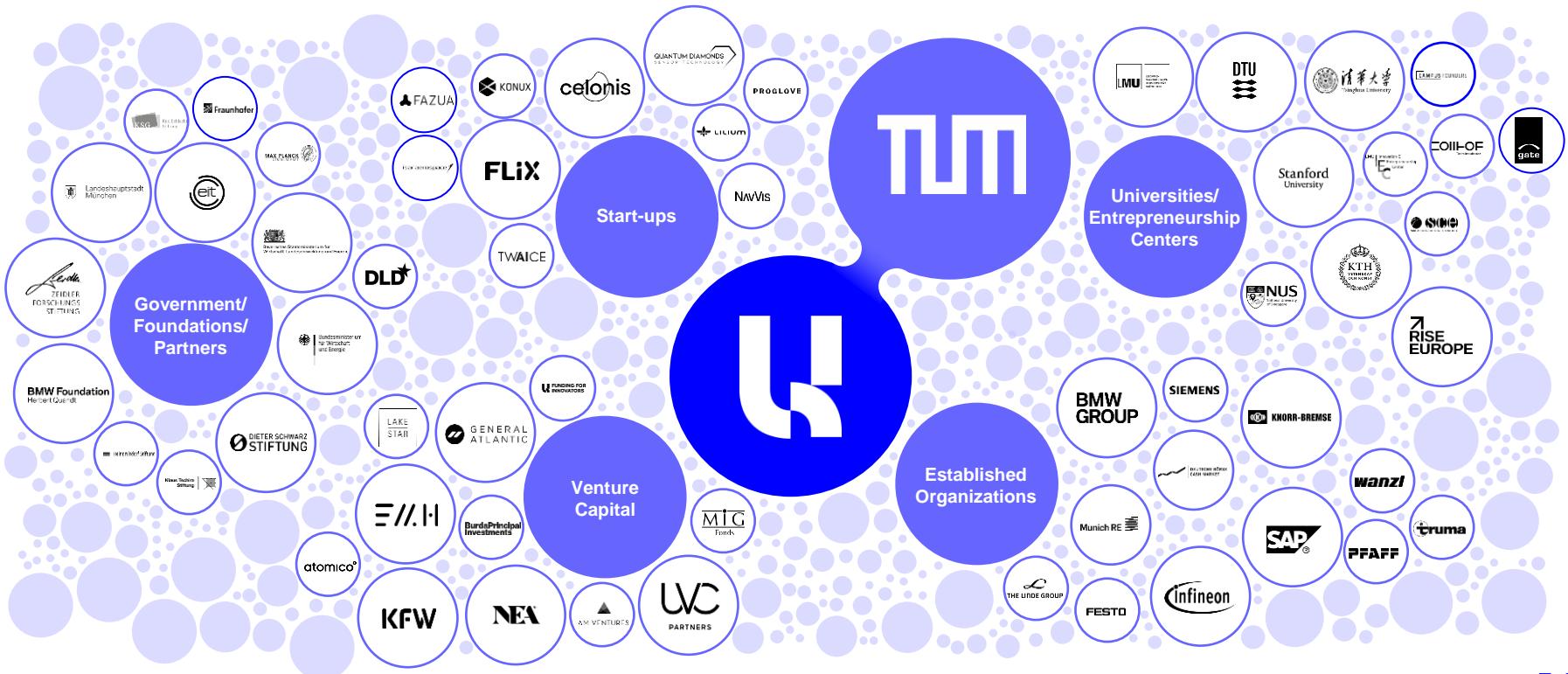


U TUM VENTURE
LABS

as an innovation
ecosystem!



We Bring Together a Community that Creates Value for Good



Bringing Innovation Forward

Entrepreneurship Education

Our programs and initiatives



Start-up Programs



Innovation for Companies



High-Tech Ecosystem



Smart Capital



Our joint ventures



Our collaborations



Erasmus for Young Entrepreneurs



EXECUTIVE MBA IN INNOVATION & BUSINESS CREATION



Bringing Innovation Forward – providing the perfect ecosystem for startup journeys from start to finish



Where Innovators Meet - Our Locations



HQ
Lichtenbergstr. 6
85748 Garching

NEBourhoods Pavilion
Theodor-Heuss-Platz 1
81737 München, Neuperlach



HQ
Munich Urban Colab
Freddie-Mercury-Str. 5
80797 Munich



HQ
Lichtenbergstr. 6
85748 Garching

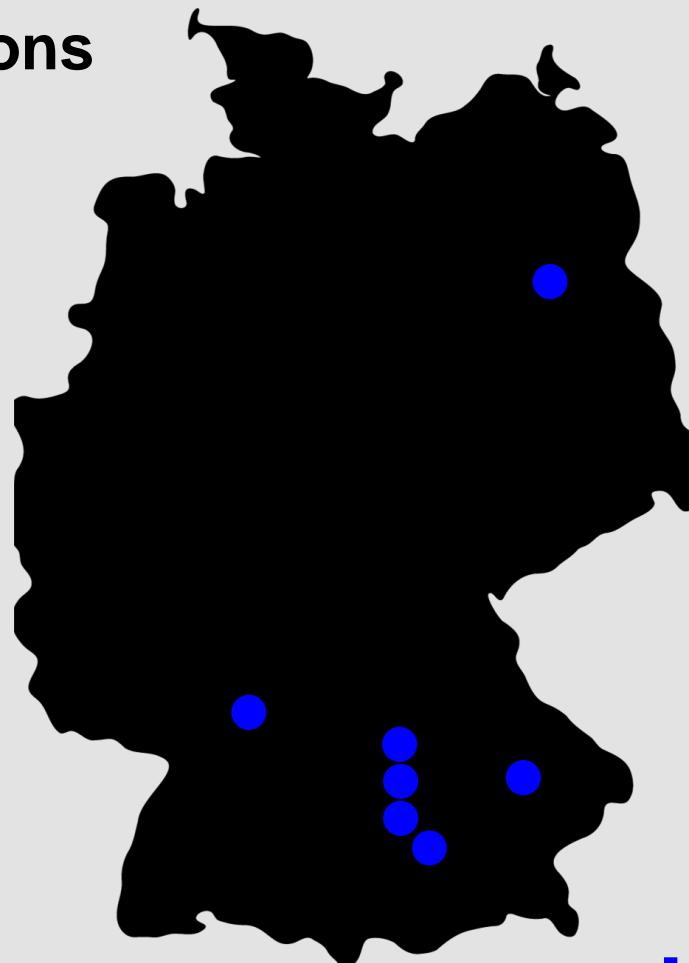
Munich Office
Munich Urban Colab
Freddie-Mercury-Str. 5
80797 Munich

Berlin Office
Friedrichstr. 68
10117 Berlin

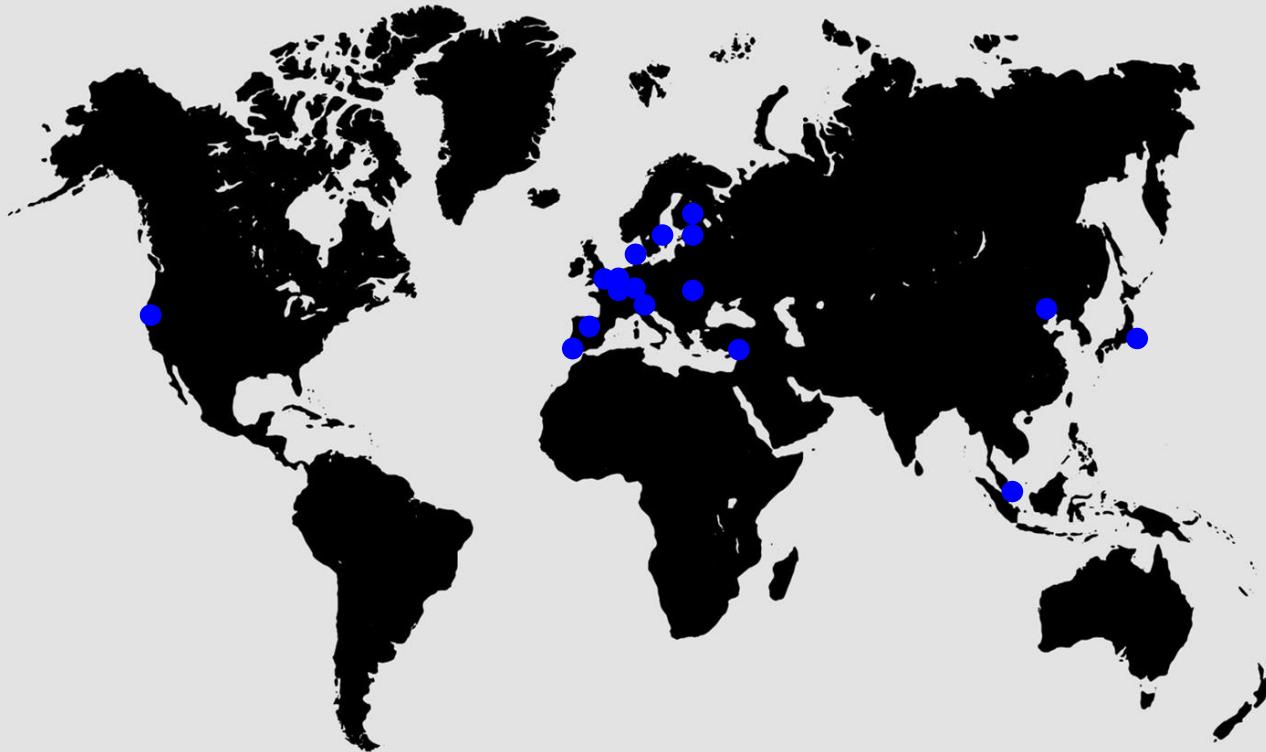


HQ
Lichtenbergstr. 6
85748 Garching

14 Labs in 6 Locations
Munich / Ottobrunn / Garching / Freising
Heilbronn / Straubing



Strong International Partners



IN EUROPE

"Like-minded strong partners in Europe join forces with UnternehmerTUM as impulse generators for human-centered and sustainable tech innovation."

- Rise Europe
"The European network of leading start-up ecosystem builders"
Aalto University – Agoranov – beta-i – Campus Founders – DTU + DTU Skylab – HighTechXL – École Polytechnique – ETH Zurich – HighTech XL – IE University – Imperial College London + Imperial – IniTS – KTH + Sting – Oxford Enspire – TalTech – Tangent – Trinity College Dublin – Vento
- École polytechnique fédérale de Lausanne
- HEC Paris
- PoliHub, Milano
- Politecnico di Milano
- Technion Israel
- TU Eindhoven

GLOBAL

"UnternehmerTUM builds and nurtures partnerships with globally leading Entrepreneurship Ecosystems, e.g., TUM Partners of Excellence."

- German Accelerator (GASEA) + NUS, Singapore
- Stanford + UC Berkeley, Silicon Valley
- Tsinghua University + x-lab + z-park, Beijing
- University of Tokyo



UnternehmerTUM in Press – Highlights





Board and Management

„Through my commitment, I want to encourage entrepreneurship in Germany. As an entrepreneur I know that the work of UnternehmerTUM is an important step towards a new culture of entrepreneurship in our society.“

Susanne Klatten

Management Board (MB), Supervisory Board (SB):

Andreas Liebl (MB)

Christian Mohr (MB)

Claudia Frey (MB)

Prof. Dr. Frank Richter (SB)

Stefan Drüssler (MB)

Peter Schwarzenbauer (SB)

Thomas Zeller (MB)

Prof. Dr. Dr. Ann-Kristin Achleitner (SB)

Prof. Dr. Helmut Schönenberger (MB)

Susanne Klatten (SB)

Prof. Dr. Thomas F. Hofmann (SB)

Not depicted: **Philipp Gerbert** (MB)



//

Agenda

1. UnternehmerTUM
2. CIRCULAR REPUBLIC
3. Diskussion Kooperationsmöglichkeiten



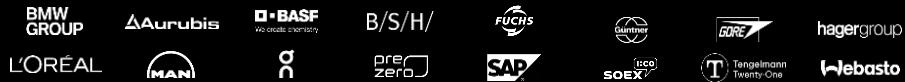
Brief summary of CIRCULAR REPUBLIC

At UnternehmerTUM, visions turn into value. Our teams empower innovation enthusiasts to take entrepreneurial action. Together with start-ups and established companies, we drive tech ventures forward - from first idea to market leadership. In collaboration with the Technical University of Munich (TUM) and entrepreneur Susanne Klatten, we've been promoting future-forward start-ups such as Celonis, Konux, Lilium, inveox, and Isar Aerospace since 2002.

CIRCULAR REPUBLIC is UnternehmerTUM's initiative to drive a Circular Economy. Together with our partners, we build an **implementation alliance for circularity**.

Leveraging the innovation ecosystem of **Europe's largest center for innovation and entrepreneurship**, we lead multi-stakeholder-projects to close the loop in targeted sectors such as batteries/vehicles, textiles and electronics/ICT or packaging and enable start-ups and company partners to become change-makers for a prosperous, resilient and sustainable economy. With the first CIRCULAR REPUBLIC FESTIVAL in November 2023, we have created the central European lead event for applied Circular Economy with 2000+ participants on site at the Munich Urban Colab and throughout Munich and Germany.

Corporate partners



Leveraging the innovation ecosystem of UnternehmerTUM ecosystem, we turn circularity into a reality

CE Researchers and Think Tanks

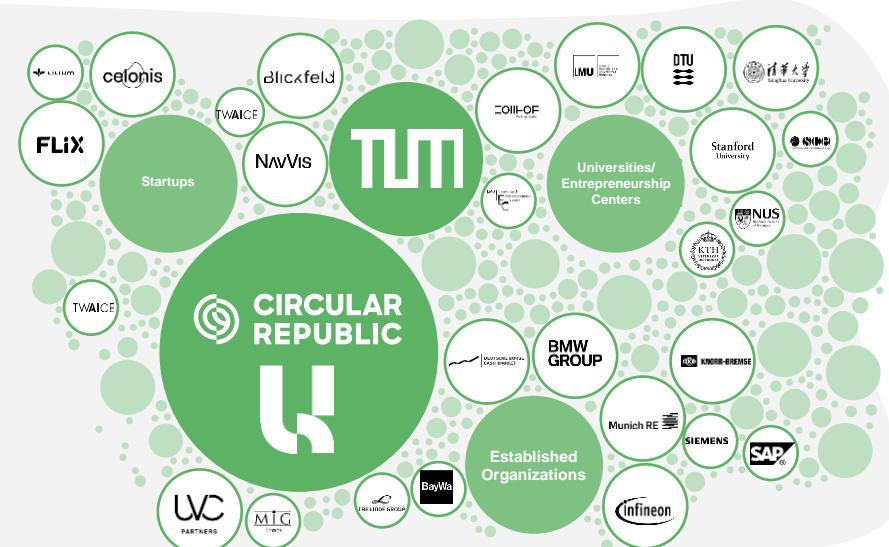
produce circular economy
theory, frameworks and status quo
descriptions

CE Consultants

develop strategies
for circular businesses

CIRCULAR REPUBLIC

builds on years of of
world class CE research
and translates good
theory into **good**
practice by leveraging
Europe's largest
entrepreneurship and
innovation center



UNTER NEHMER TUM

>11.000

participants entrepreneurship and tech education formats in 2023

>720

supported start-ups in 2023 in
(pre-)incubators and accelerators

>50

new scalable start-ups
every year

2.2

billion USD invested in 2023



Enable, act, inspire: Building an industrial implementation alliance for the circular economy



ENABLE

We empower to make circular economy a reality and turn it into the core of your business model

access to the circular economy **start-up ecosystem**

different kinds of circular economy **learning programs** (peer-to-peer Masterclass, business strategy gaming, circular readiness scan)

direct access to latest **research** and R&D cooperation opportunities



ACT

We connect relevant partners and develop circular solutions along value chains, creating scalable and investable opportunities.

initiation and orchestration of sector-specific **multi-stakeholder projects** with established companies and start-ups

facilitation of **startup-corporate-collaboration** across market segments

hackathons, tech challenges and startup competitions in order to develop solutions with a large talent pool



INSPIRE

We provide system-changing impulses and drive the circular economy forward

various **communication channels** for your messages and numerous **events** with networking opportunities, inspiration and knowledge-sharing

CIRCULAR REPUBLIC FESTIVAL as **central-european lead event** on circularity

publication of the first-ever **Circularity Gap Report** on urban level for Munich in autumn 2023

We are a
non-profit
organization

Our activities are made possible through our
corporate partners
who pay a membership fee and co-shape our initiative

As a hands-on
implementation platform and neutral orchestrator
we are able to drive industry-defining projects and manage cross-company collaboration



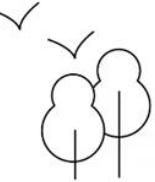
Driving circularity in UnternehmerTUM start-up programs as well as with dedicated company formats

- > 150 participants in-person workshops with broad reach into different company departments (Finance, Sales, Purchasing, Innovation, Sustainability, Strategy, Technology, Product Development, Production, Services, Quality Management, ...)
- > 50 participants from **Start-ups** and established integration into (some) UnternehmerTUM programmes such as XPORE, Manage & More, etc.



- Building on in-person workshops, we are now developing a Circular Economy e-learning platform for curated content and tailored learning journeys





REACH OUT TO GET
FULL CONTENT!

CIRUCLARREPUBLIC@
UNTERNEHMERTUM.DE

Resource Recovery ⑥

Capturing the value of materials and energy from products after they've been used, through recovery and recycling.

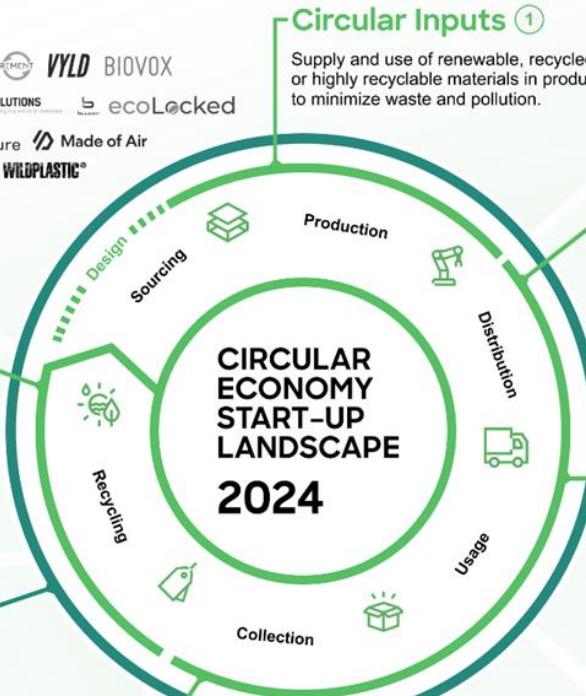


Circular Enablers ⑤

Promote sustainability, minimize waste, and enhance resource efficiency, supporting the transition towards a circular economy.



Source: CIRCULAR REPUBLIC database; based on Lacy et al. 2020.



Circular Inputs ①

Supply and use of renewable, recycled, or highly recyclable materials in production to minimize waste and pollution.



Sharing Platforms ②

Maximized utility rates of products and assets through collaborative usage and shared access, often through digital technology.



Product-as-a-Service ③

Commercialization of a product's usage and function rather than its possession, ensuring performance, maintenance and reverse logistics.



Product Lifetime Extension ④

Strategies to prolong the lifespan of a product at its highest value, e.g. by upgrades, repair, reconditioning, or resale on secondary market.



Selected circular start-ups from the UnternehmerTUM and CIRCULAR REPUBLIC ecosystem

traceless



Concular



resourtecs®



hey circle



LiBcycle



Cirplus



Resourcify



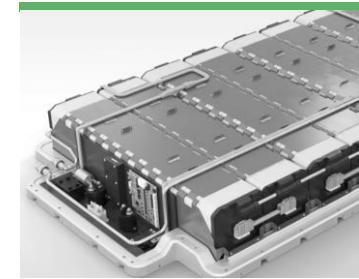
STABL



fixfirst



tozero



In targeted sectors, we initiate and orchestrate collaboration projects to close the loop

ENABLE

ACT

INSPIRE

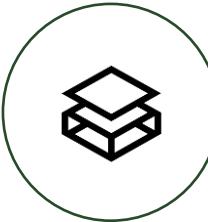


EV batteries

since 01/2023

Reverse logistics, second life, automated disassembly and hydrometallurgical recycling of 13 t of BEV batteries.

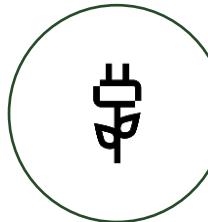
Details on next slide



Textiles

since 01/2023

Multiple workstreams to redesign the textiles sector including use, collection, and recycling



Electronics and ICT

since Q2/2024

Industrial electronics: Closed loop including take-back, reuse/refurbishment/ reman and enhanced recycling, combined with EaaS models

Consumer electronics: Takeback, disassembly and recycling of large household appliances



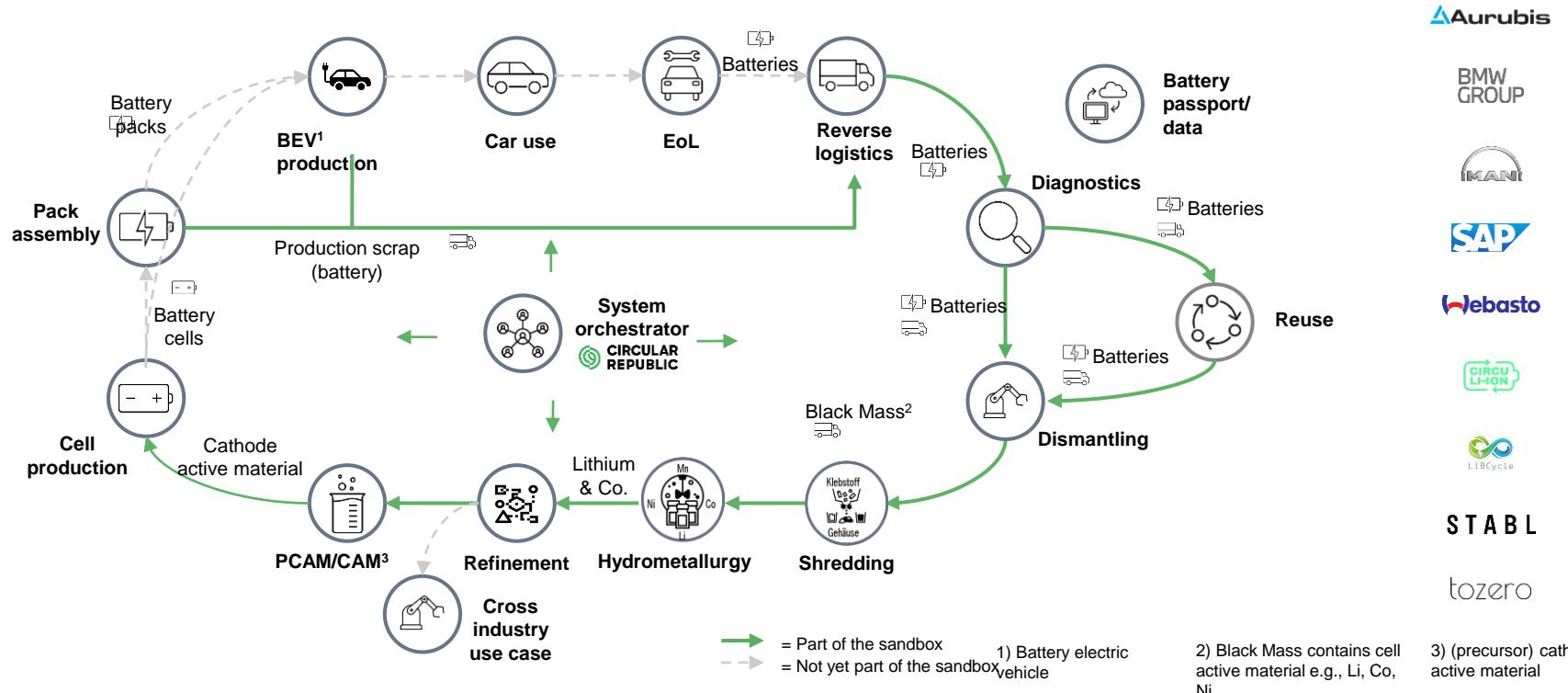
Packaging

starting Q2/2024

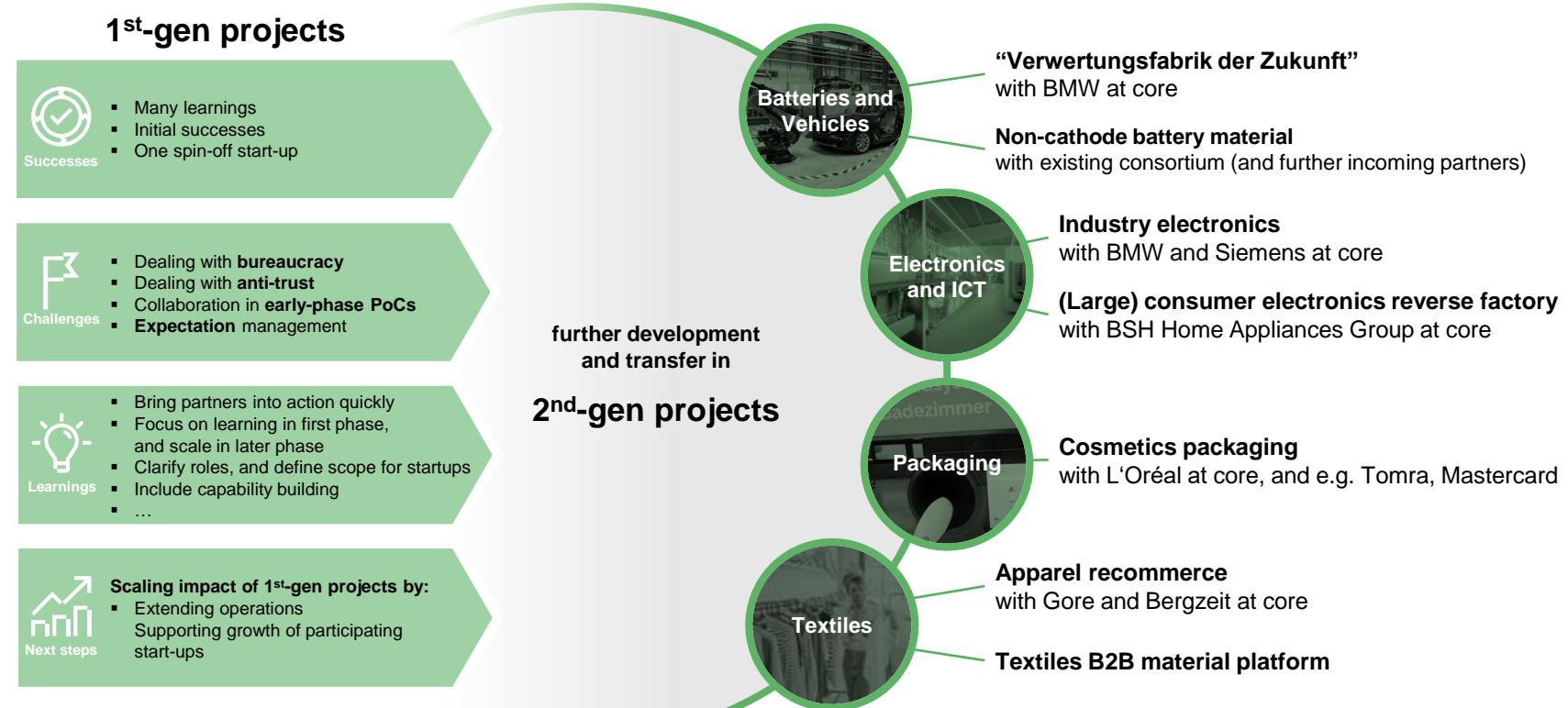
Open loop for cosmetics packaging incl. takeback mechanisms, recycling and sorting, and secondary materials based production and sourcing



Exemplary „ACT“-Project: Closing the loop for battery materials in a cross-industry collaboration



In the next generation of our projects, we apply learnings to further action fields in automotive and other industries



Promoting circularity in broad industry, society and politics



- Successful premiere of the **CIRCULAR REPUBLIC FESTIVAL** (11/23) as Central-European lead event for the Circular Economy, with major speakers and > 2.000 participants on-site and virtually, and vast media coverage
- Close collaboration with the **Federal Chancellery** (since 07/23) in the “Allianz für Transformation”, culminating in the “Spitzendialog” with Olaf Scholz and Oliver Zipse (01/24)

- Launch of the new CR **Start-up Landscape** (03/24)
- Upcoming joint “**Grand Challenge**” with **SPRIND** (Bundesagentur für Sprunginnovationen) on Circular Economy, starting presumably 07/24 as a three-year program



Let's work together to build a circular economy!



Niclas-Alexander Mauß
+49 176 97864101
niclas.mauss@unternehmertum.de

CIRCULAR REPUBLIC
UnternehmerTUM GmbH
Freddie-Mercury-Str. 5
80797 Munich

www.circular-republic.org | www.unternehmertum.de



//

Agenda

1. UnternehmerTUM
2. CIRCULAR REPUBLIC
3. Diskussion Kooperationsmöglichkeiten

