

Circular Valley

North Rhine-Westphalia's way to the Circular Economy

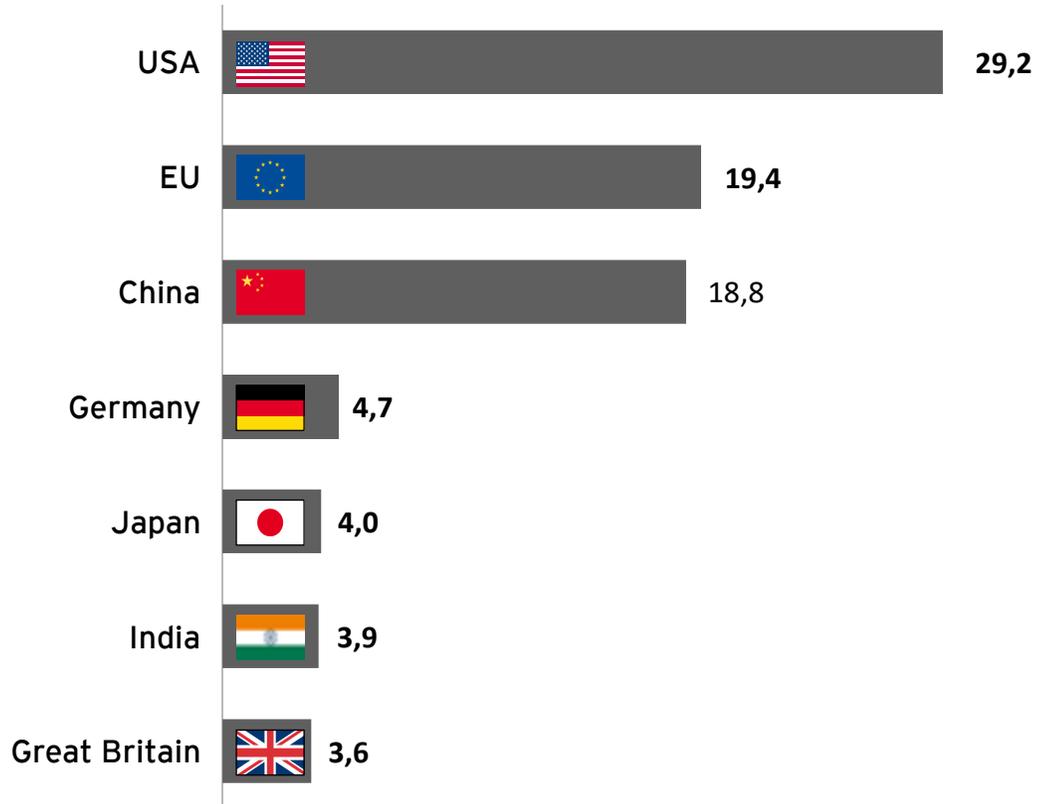
German-Japanese Business and Investment Seminar

Japan, June 2025

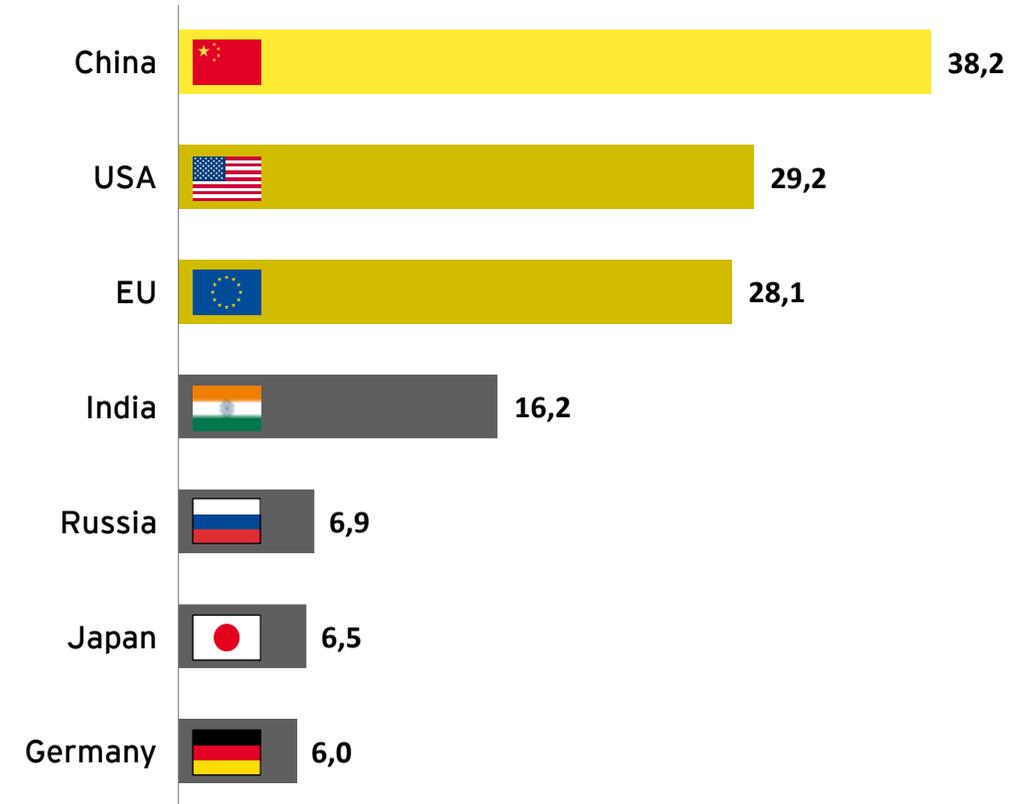
WHY DO WE NEED A CIRCULAR
VALLEY?

IN THE PURCHASE POWER ADJUSTED GDP JAPAN AND GERMANY HAVE FALLEN BEHIND

GDP (NOMINAL) 2024 IN Trillion US\$ ¹



GDP (PPA*) 2024 IN Trillion US\$ ¹



¹IWF (2024)

* PPA – purchase power adjusted

MOST OF OUR WASTE COMES BACK TO US ONE WAY OR ANOTHER



100.000.000.000 TONS OF EMISSIONS/WASTE ANNUALLY



On average approximately 35 kg per day and person¹⁾

Increasing with number of consumers

Microplastics in the food chain
(5 gr per week and person according to WWF)

1) incl. CO₂, construction waste, production waste, municipal waste,...

VARIOUS STAKEHOLDERS ARE CONCERNED



Business leaders worry about resource supply, EU taxonomy and reputational risks

Politicians see the long-term ecological and social cost and want to steer against

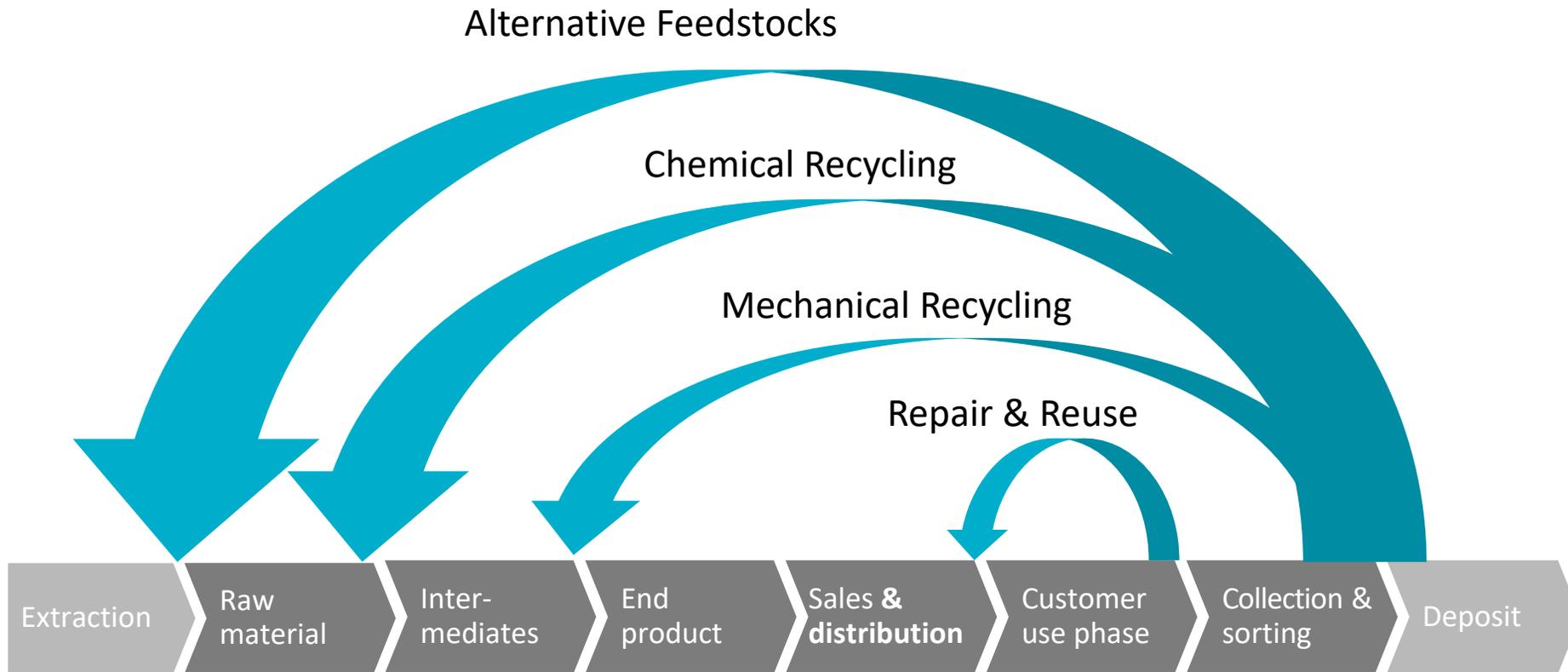
Consumers experience planned obsolescence and care about social and ecological threats

Activist groups address the ecological and social damage

CLOSING LOOPS REQUIRES COLLABORATION



THERE ARE SEVERAL WAYS TO AVOID HARMFUL EMISSIONS INTO THE ENVIRONMENT



+ Design for Circularity

+ Business models based on using instead of owning

MANY LOOPS CAN STILL NOT BE CLOSED TODAY

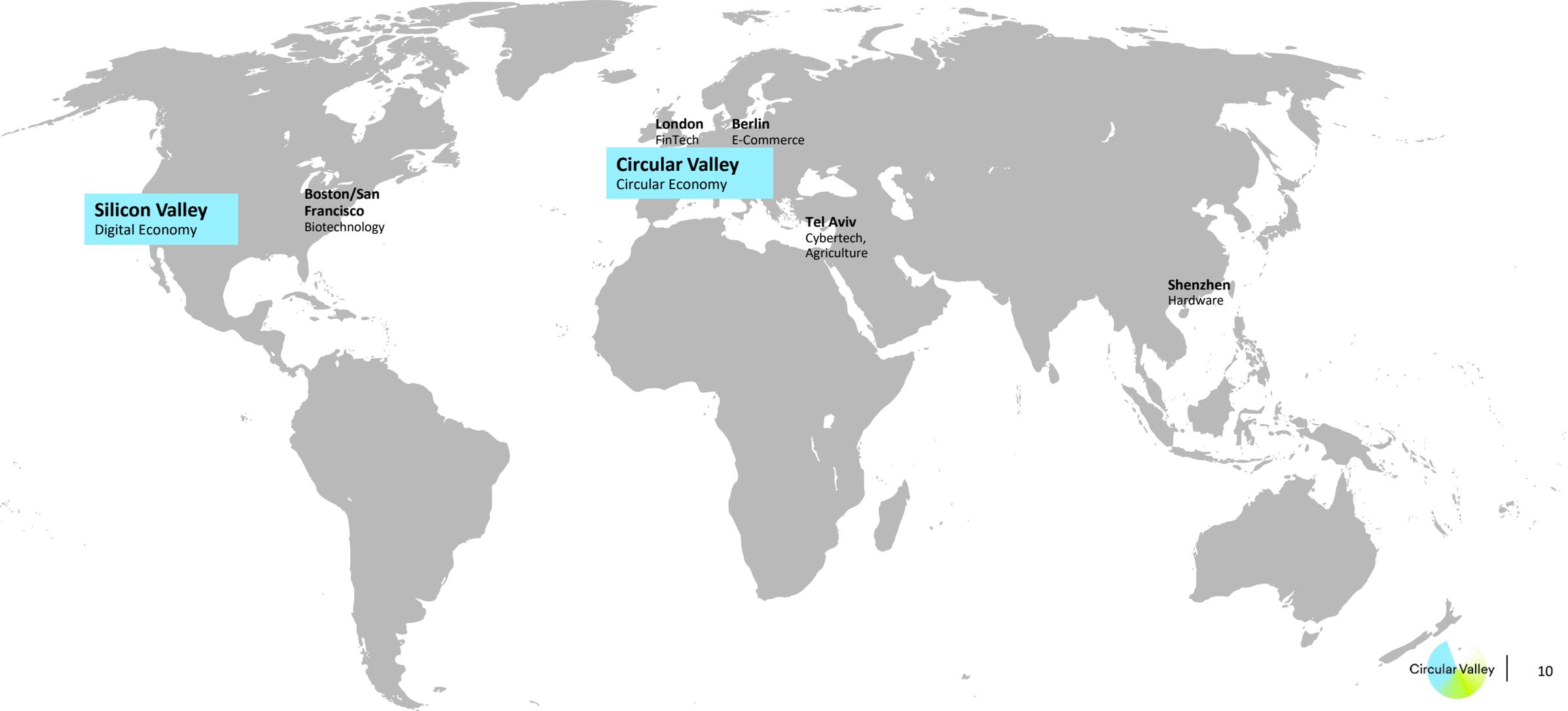


Composite materials are a major challenge because they are difficult to recycle

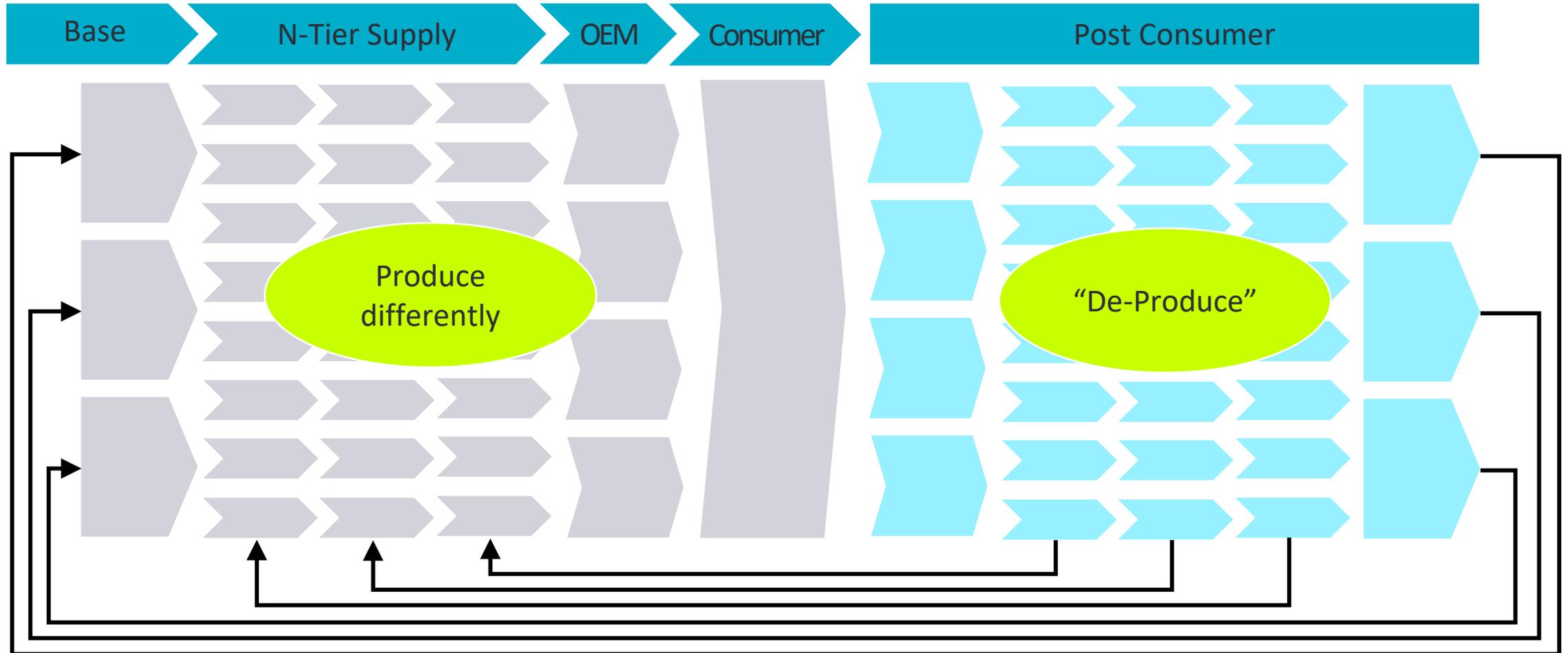
(e.g. lithium-ion car batteries, CFRP aircraft, wind turbines, multi-layer packaging, etc.)



CIRCULAR VALLEY IS FOR CIRCULAR WHAT SILICON VALLEY IS FOR DIGITAL



WE FACE THE CHALLENGE TO PRODUCE DIFFERENTLY AND TO “DE-PRODUCE”



Wanted: Repair, Reuse, Remanufacture, Refurbish, Recycle
Less wanted: Repurpose, Recover

**WHY IS THE RHINE-RUHR REGION
IDEAL?**

CIRCULAR VALLEY IS THE WIDER RHINE-RUHR REGION



THE RHINE-RUHR REGION IS EUROPE'S LARGEST INDUSTRIALIZED METROPOLITAN AREA



THE WIDER RHINE-RUHR REGION IS THE IDEAL CIRCULAR VALLEY FOR FIVE KEY REASONS

1 Access to companies needing solutions

2 Established and new circular companies

3 Attractive science landscape

4 Cosmopolitan, high quality of life

5 Place of the 1st and 2nd industrial revolutions on the European mainland



CIRCULAR VALLEY CONNECTS 300+ GLOBAL MARKET LEADERS FROM ALL INDUSTRIES

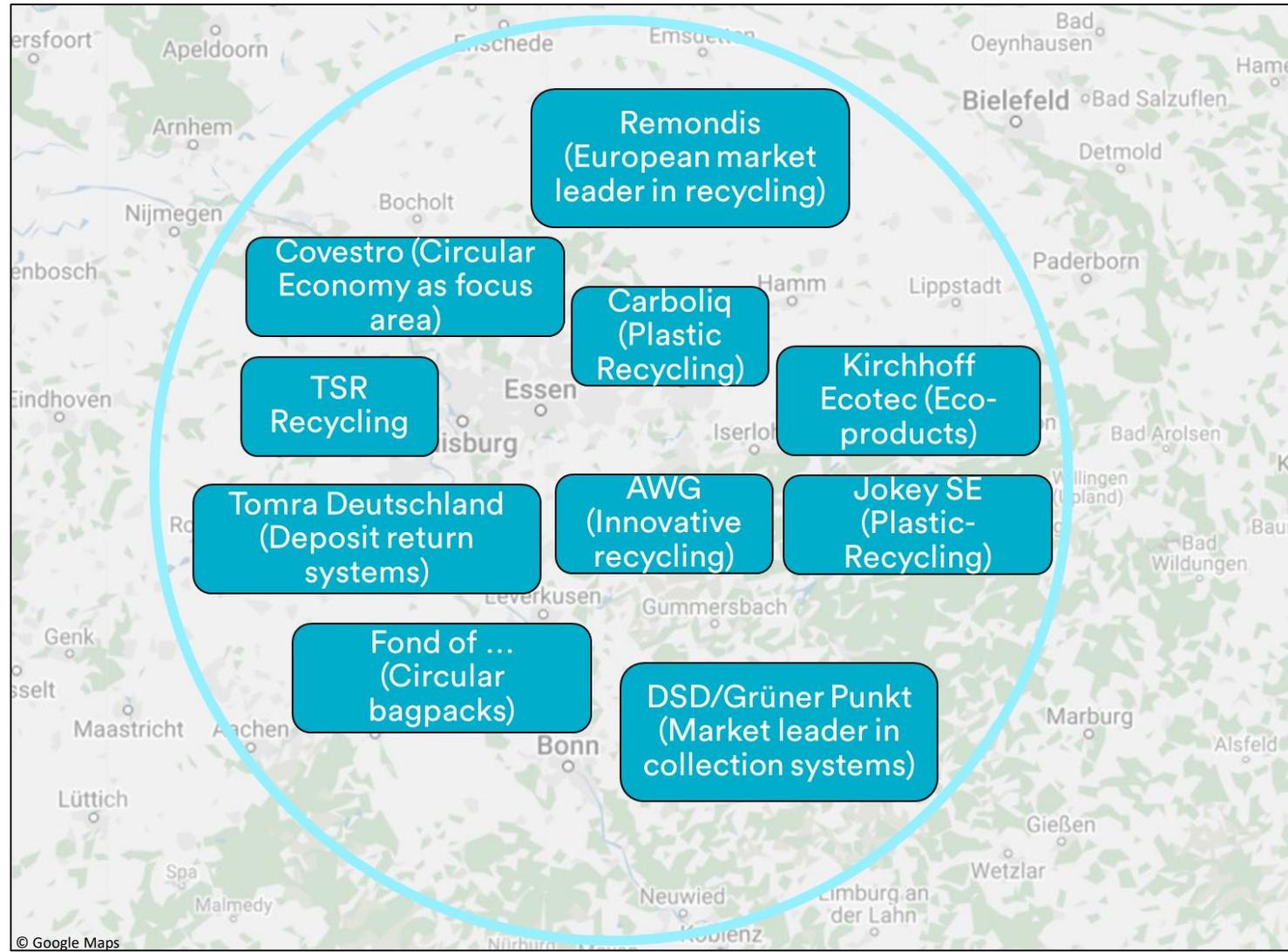
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Selected Examples
Locations not exact

ESTABLISHED AND NEW COMPANIES IN THE REGION ARE LEADERS IN CIRCULARITY

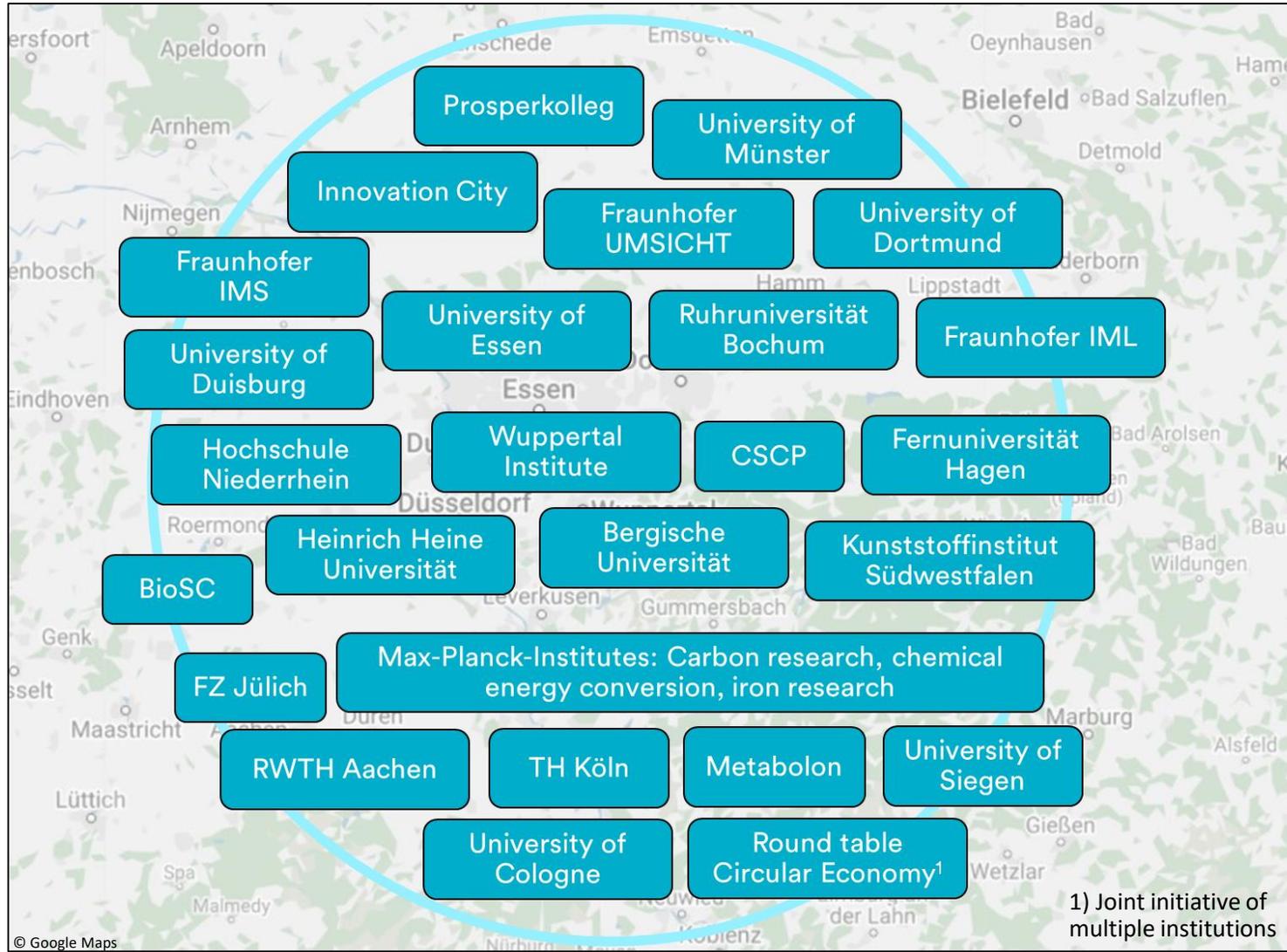
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Selected Examples
Locations not exact

OVER 70 UNIVERSITIES AND RESEARCH INSTITUTES PROVIDE SCIENTIFIC EXCELLENCE

3



Selected Examples
Locations not exact

THE REGION IS ATTRACTIVE AND WELCOMING FOR PEOPLE FROM ALL OVER THE WORLD

4



Large international communities, e.g. Düsseldorf has a large Japanese community in Germany's only Japantown

Düsseldorf is the gateway to Europe for many international companies

Three international airports connect to the world



Over 30 opera houses, theaters and world-famous concert venues

World-reknown concerts (e.g. "Klavierfestival Ruhr")

At the same time, it is a region of doers

IT HAS A RICH HISTORY THAT LIVES ON TODAY

5



The Ruhr and Bergisches Land areas were home to many early industries

Water and coal were the basis for the 1st and 2nd industrialization waves in the 18th and 19th centuries

Broad industry coverage: metal, machinery and plant engineering, household appliances, chemicals, high-performance fibers/textiles, lighting, commerce, packaging

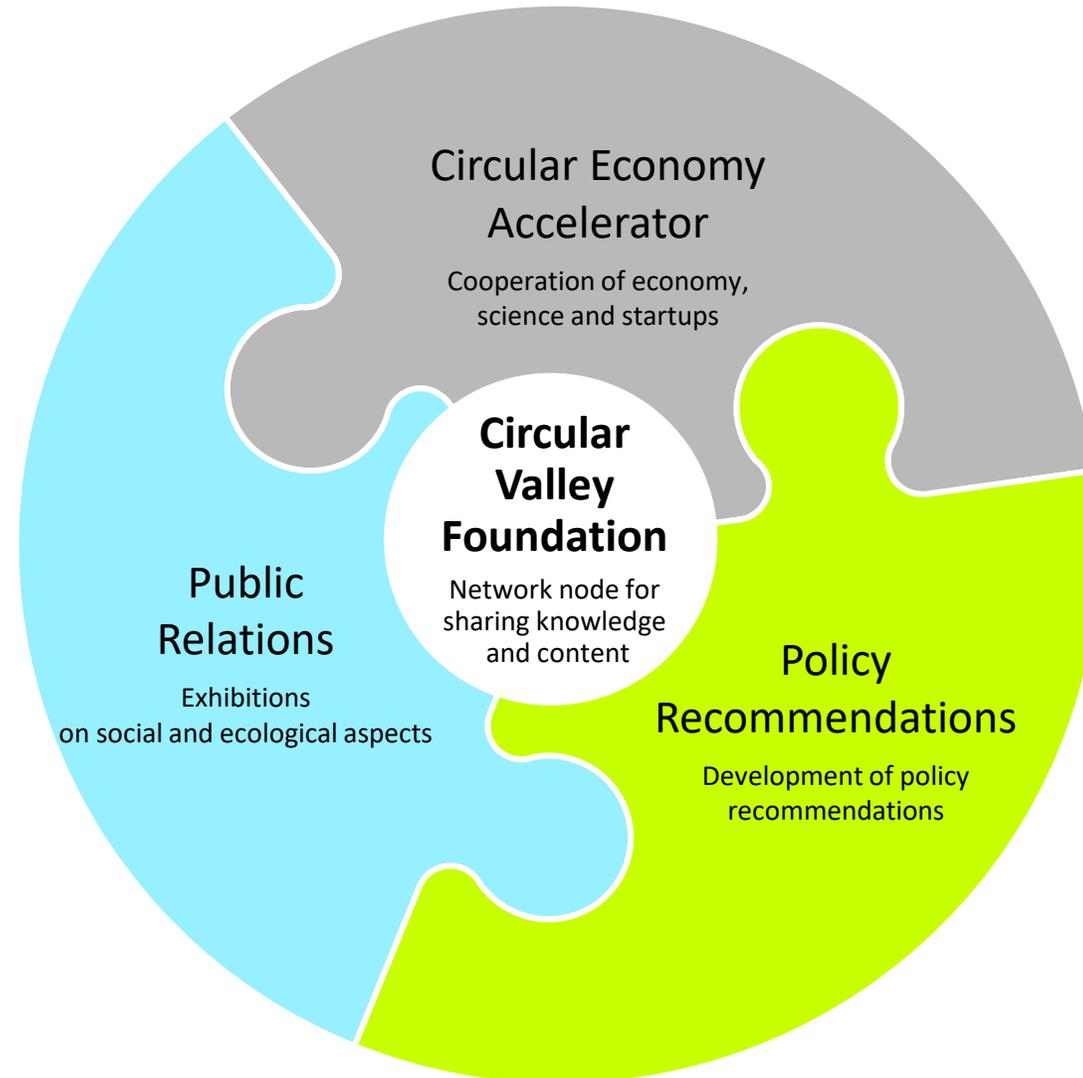
Go back to the roots and close the loop

Many investors appreciate tradition



**HOW DOES NORTH RHINE-
WESTPHALIA ADDRESS THE
CHALLENGE?**

THE CIRCULAR VALLEY FOUNDATION ORGANIZES THE KEY ACTIVITIES



PUBLIC RELATIONS WORK BRINGS THE TOPIC TO THE CONSUMERS



© HA Schult, Trash People

Beyond business and academia, it is important that the public understands circular economy issues

Public relations - including art - can reach over 18 million people in Circular Valley

THE WORLD'S FIRST DEDICATED CIRCULAR ECONOMY ACCELERATOR



Companies from the region and beyond come into direct contact with innovative startups

Support young entrepreneurs and intrapreneurs from all over the world

Turn inventions into innovations, put business models behind



BUSINESS AND SCIENCE CAN JOINTLY DEVELOP RECOMMENDATIONS FOR POLITICAL ACTION



THERE IS EXCELLENT EXCHANGE WITH POLITICAL DECISION-MAKERS IN NORTH RHINE-WESTPHALIA



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A FORMER GAS TANK SERVES AS THE SYMBOLIC CENTER OF CIRCULAR VALLEY – ON THE BIRTH SITE OF BAYER



TOGETHER WE SET THE STONE ROLLING IN NORTH RHINE-WESTPHALIA



CIRCULAR VALLEY IS SUPPORTED BY PARTNERS FROM ALL INDUSTRIES AND ALL SIZES

Founders



Sponsors



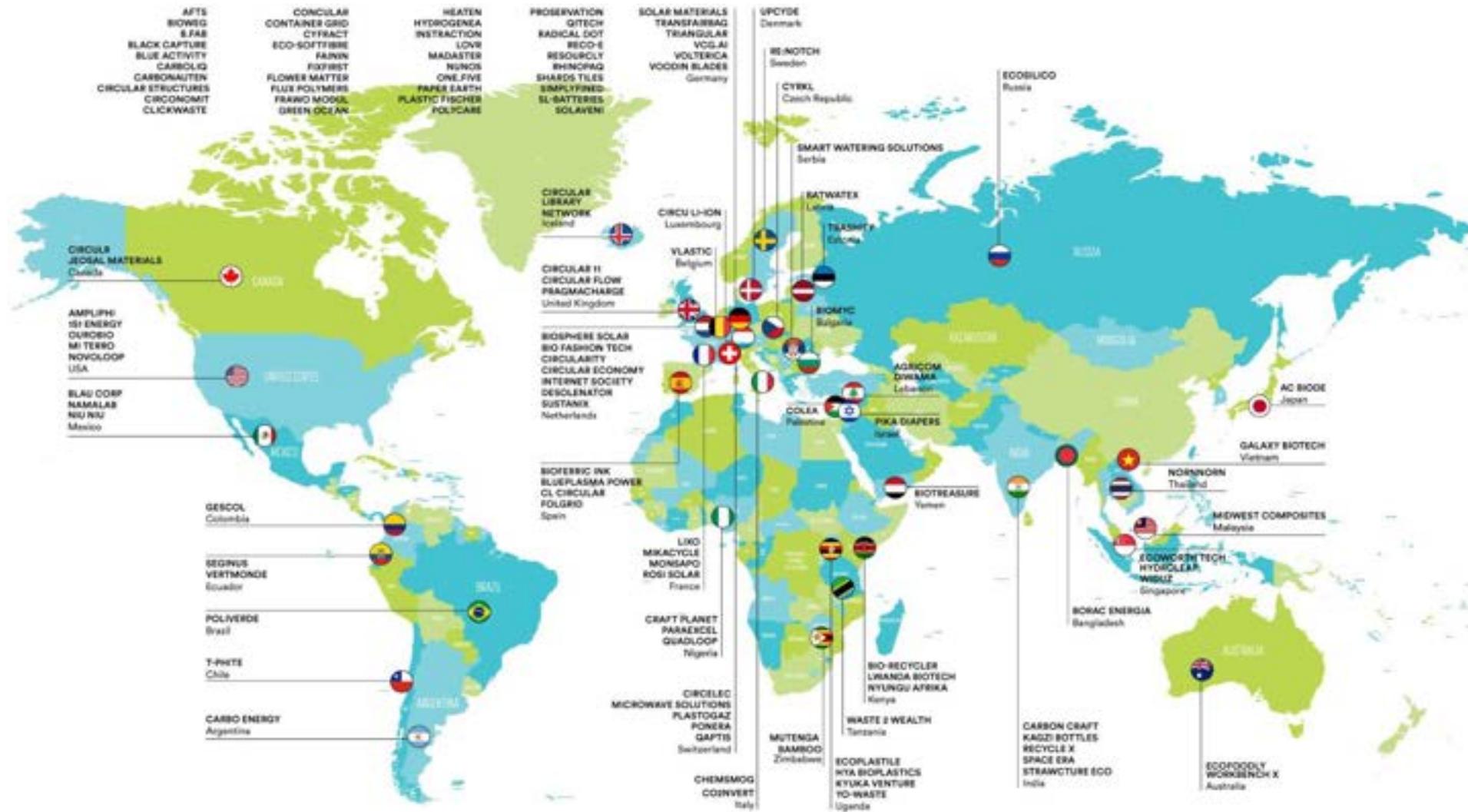
Donors



Supporters



WE HAVE WELCOMED MORE THAN 130 STARTUPS FROM AROUND THE WORLD



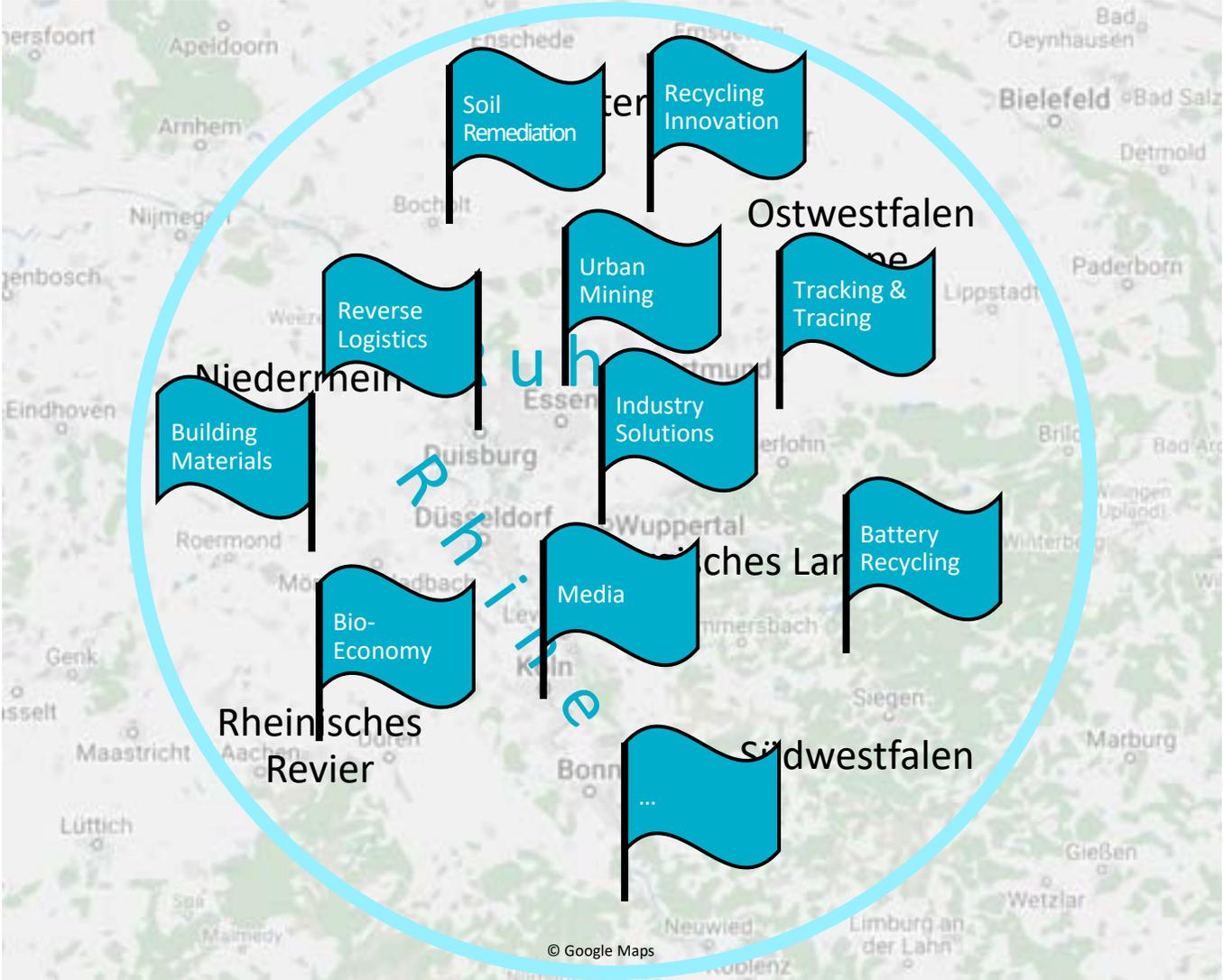
NUMEROUS SUCCESS STORIES ARE BEING WRITTEN



PARTNER TALKS CONNECT THE PARTNERS FROM THE REGION ON A REGULAR BASIS



IN THE LONGER TERM, ADDITIONAL CIRCULARITY TOPICS WILL BE ESTABLISHED IN CIRCULAR VALLEY



NORTH RHINE-WESTPHALIA AND FLANDERS DRIVE A CROSS-BORDER COOPERATION ON CIRCULAR ECONOMY



Chemistry: long-term outlook for the chemical industry in North Rhine-Westphalia and Flanders

Batteries: opportunities of stabilizing the European Renewable Energy system through batteries; recycling and production of new batteries as lower priority focus

Building materials: Development of a competence center for Circularity in the Building sector

THE CIRCULAR VALLEY FORUM IS THE EVENT WHERE ALL PARTNERS MEET



TOGETHER WITH MESSE DÜSSELDORF CIRCULAR VALLEY ESTABLISHED THE CIRCULAR VALLEY CONVENTION



Circular Valley

Thank you for your attention!

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LinkedIn



Instagram

Gefördert durch:

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Ministerium für Umwelt,
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