

RAIN

Concrete is missing

leaves are wet in puddles

regret of passing

A short portable about how we broke our planet and how we can design our beautiful end.

I have a dream



<https://www.designboom.com/architecture/mvrdv-heatherwick-oma-west-8-madrid-renazca-development-02-05-2021/>

But it looks like this instead

CLIMATE DEPRESSION

New Concept: Climate Depression. Even before the times of COVID depression. Generations Z and generations X and Y are aware of what is happening with the planet on which they operate, they are trying to either fight the changes or adapt to new living conditions. „Climate depression is a term that describes the chronic fear of extinction resulting from global warming”

<https://oko.press/to-bedzie-koniec-cywilizacji-jaka-znamy-depresja-klimatyczna-w-polsce-wywiad/>.



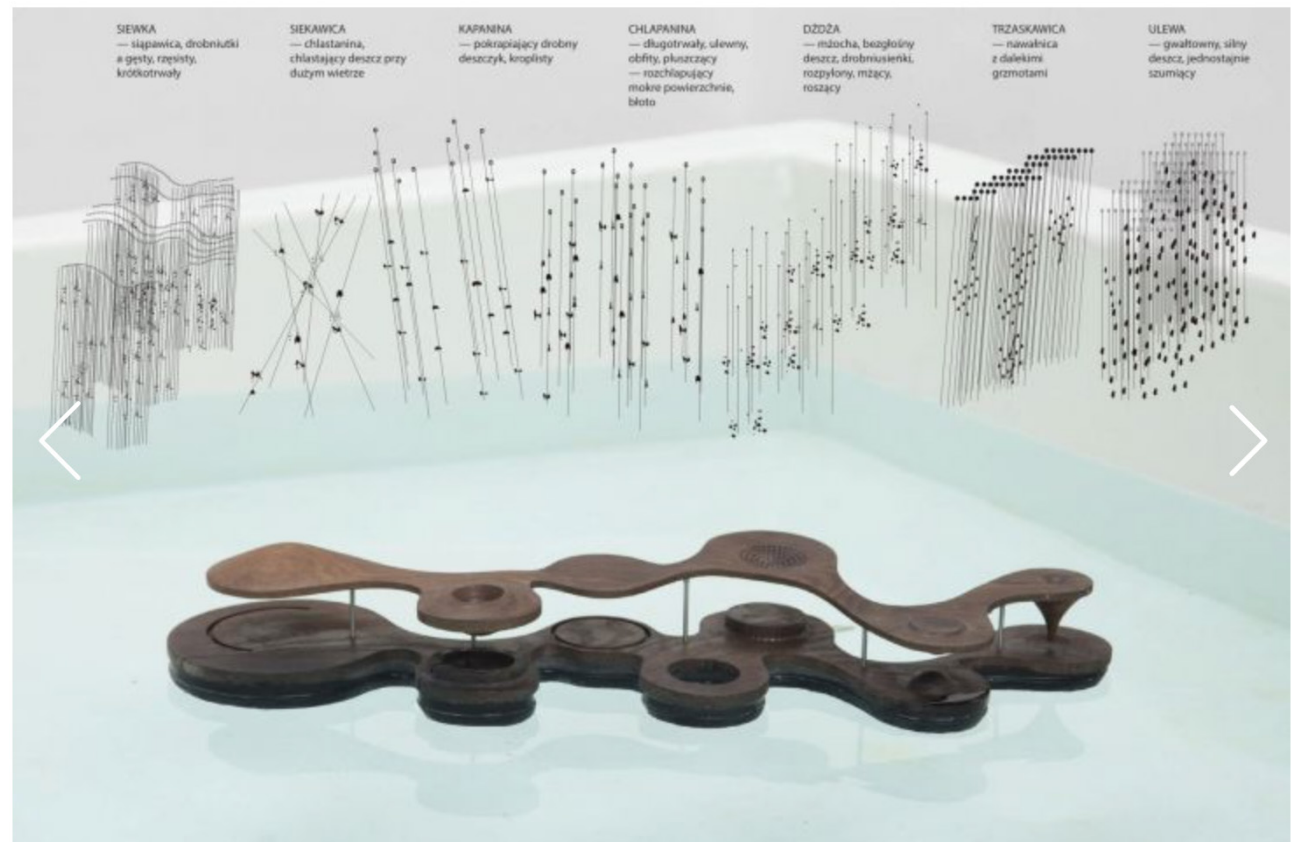
inspiration

Many of Centrala's initiatives are successful attempts to spark a social discussion on the protection and revitalization of the heritage of the modernist avant-garde.

Centrala's actions and publications stimulate reflection on the urban space. Their initiatives influence how the city is understood and used, and in what direction decisions concerning its transformation are taken.

„Deszcz” z cyklu Amplifikacja natury

05 lutego '20



Grupa Centralna



CENTRALA GROUP FROM WARSAW

Małgosia Kuciewicz:

Building knowledge, ideas, problematizing certain matters is as important as building physical objects.

As a result, the collective imagination is able to change reality. The collective awareness of what the city consists of has a huge impact on how the city itself is perceived, understood and used, and in what direction decisions about its transformation are going.

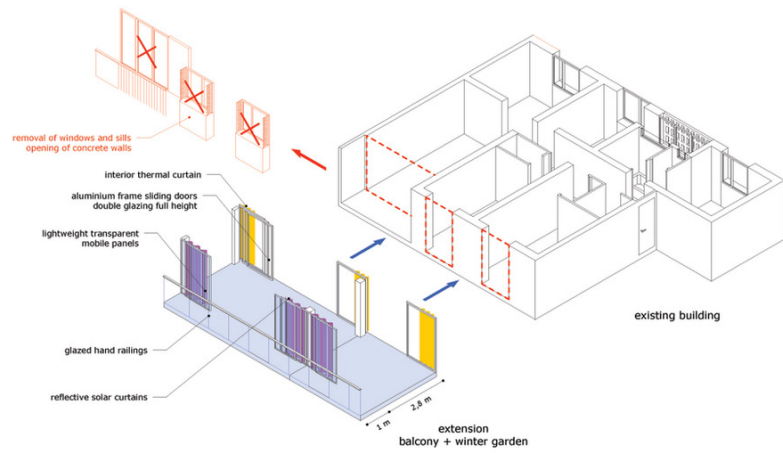
The challenge today is to act on a larger scale, with a planetary imagination.

This is what our neighbors do

Many works aimed at the revitalization of German panel housing estates or their reconstruction in order to meet the needs of the inhabitants (the so-called humanization), were carried out with considerable support from the state. Architects were not always limited to changing the facade and technical modernization of the building (e.g. replacement of installations and old elevators). Sometimes, ideas related to the addition of external elevators or the arrangement of gardens on the roofs of the lower blocks were also implemented. Here is an example of a model reconstruction of a multi-family building that is certainly known to you below



REBUILDING BLOCKS OF FLATS IN BORDEAUX



The price of the conversion is 365 euros (approx. 50,000 euros for an apartment in 2016!!!), the entire investment is 27.7 million euros.

Indeed, the surface area has increased from 38,400 to 68,000 m and the rent has not changed.

However, please imagine such a reconstruction in Poland. Where in Poland, the average cost of CONSTRUCTION of a flat is PLN 5,112 (after a significant increase in inflation)

Thus, the entire investment, if we wanted to use Western standards, would rather look like this kintsugi.

https://fabrykaform.pl/seletti-wazon-kintsugi-32-cm?a_aid=64&gclid=EAlalQobChMI5L-Fv-qh9AIVeAWiAx2yTwm-EAQYAiABEgKu_vD_BwE



please remember about a Dream



We thought about **reducing costs,**
increasing durability, reducing the need
to transport building materials
and reducing our carbon footprint.

And we came up with
a **composite concrete.**

THE FUTURE OF CONCRETE

Currently most used (about 6 billion m³ per year) man-made material, second only to water in the entire range of materials used.

The production of concrete consumes 20 billion tons of aggregate annually and 800 million m³ of water WIRELESSLY

(approx. 5% of total water consumption) and 500 billion MJ of energy. and 5-7% of CO₂ emissions.





the pursuit of sustainable development is a „closed cycle of materials“ as a result of complete recycling.

The concrete of the future will be defined based on technical features, not in terms of composition. This means a departure from prescription concrete in favor of designed concrete referring to the notion of "usefulness" (performance concept). The new European standard PN-EN 206-1 creates this possibility.

A new type of material with unique consumer properties and qualities, which distinguishes it from classic types of substitute goods. It is a POLYMER-SAND COMPOSITE or POLYMET-GLASS COMPOSITE















**The first one is
a 30% recycled
product, and the
second one is
99% recycled.**

the basic parameters of our composite as a modern substitute for concrete

**composition: sand / glass +
polymer + flame retardant**




- 330 million tons of plastic are produced annually in the world
- only 14% of the plastic ever produced has been recycled as a raw material
- 80% of plastic rubbish found in seas and oceans was dumped on land
- almost 30% of the plastic in the oceans is made of microfibers, which are released from plastic clothes during washing.


 PETE	 HDPE	 PVC	 LDPE	 PP	 PS	 OTHER
Polyethylene Terephthalate	High Density Polyethylene	Polyvinyl Chloride	Low Density Polyethylene	Polypropylene	Polystyrene	Other
						
Recyclable	Recyclable	Recyclable at specialist points	Recyclable at specialist points	Recyclable	Recyclable at specialist points	Not easily recyclable


traditional plastic recycling


traditional glass recycling


✓  Soft drink,
Juice and water bottles

✓  Beer bottles

✓  Alcohol beverage bottles

✓  Wine and liquor bottles


✓  Food and sauce containers

✓  Clear drinking glasses


✗  Mirrors
Automotive Glass


✗  Light Bulbs

✗  Clay Flower Pots


✗  Laboratory Glass

✗  Crystal

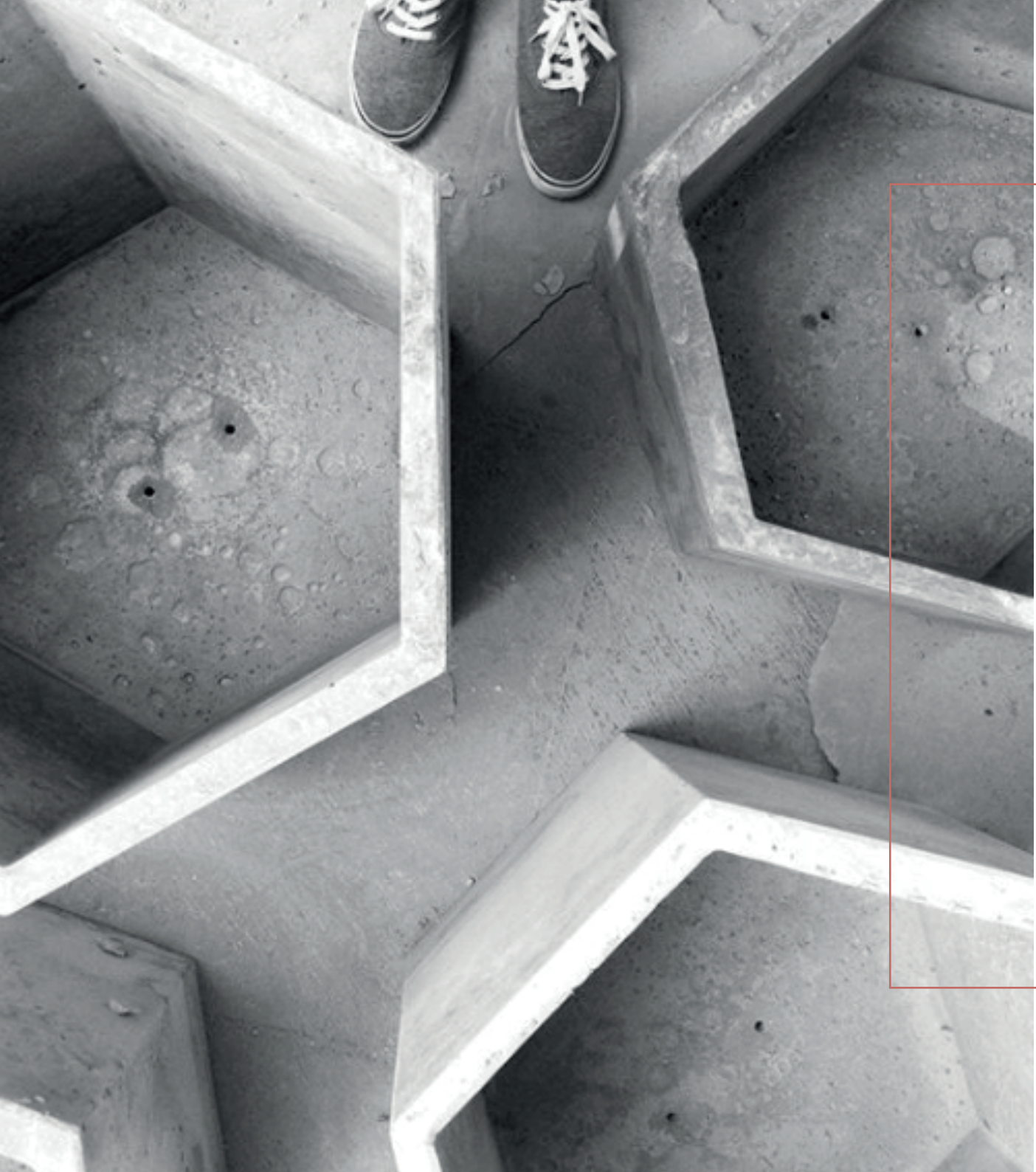
✗  Ceramic Cups
Plates and Ceramics

✗  Bottle Tops

✗  Window Glass

✗  Heat Resistant Ovenware

**use of non-
-recycled glass**



MATERIAL PROPERTIES

depending on morphology
composite:

- road haberdashery
- W20 foundations
without joints
- building blocks
(no need for insulation)
- garden furniture
- road surface

W20

W20Concrete can achieve watertightness through the use of appropriate production technology. The tightness of such concrete, preventing water penetration, makes it sometimes also called high-quality concrete. Waterproof concrete is obtained in several ways. Among other things, through the appropriate selection of ingredients, i.e. concrete mix. But also through the use of admixtures, impregnations and vibrating concrete after pouring.





POTS

BRICKS



FURNITURE



asphalt is a material (viscous liquid or rock) of natural origin (natural asphalt) or obtained as one of the fractions of processed crude oil (petroleum asphalt), with a solid or semi-solid consistency, dark brown to black in color. It is a highly durable colloidal system consisting of two phases: dispersed (asphaltenes) and dispersing (oils). It is used in the construction of road surfaces, for the production of roofing felt and as an insulating material (asphalt mastic). It is a mixture of macromolecular chain hydrocarbons, cyclic hydrocarbons and heterocyclic compounds. The quality of asphalt is determined by its softening point, ductility, penetration degree and brittleness. It belongs to the so-called bitumen.

asphalt

polymer

Polymer bitumen is road asphalt containing a specially selected polymer. Two types of polymers are used to modify asphalts: elastomers (mainly styrene-butadiene rubber - SBR and SBS) or plastomers. Therefore, polymer bitumen is called elastomer bitumen and plastomer bitumen, respectively. As a result of appropriate technological processes, the polymer and asphalt are combined to obtain a product with extraordinary properties, which increases the pavement resistance to collapse and cracking. The places recommended for the use of polymer modified bitumen are mainly roads with heavy traffic, surfaces of intersections and bridges.

asphalt



PRODUCTION

The equipment has various design solutions for use in the production of composite materials of various recipes; for the production of a wide variety of products based on them (polymer sand, polymer-glass sand, polymer-rubber polymer-porcelain, etc.). It consists of 100% by weight of recycled components. In the construction of devices, a number of unique technical solutions have been used, allowing to achieve high-quality workmanship and reliability of the manufactured products.

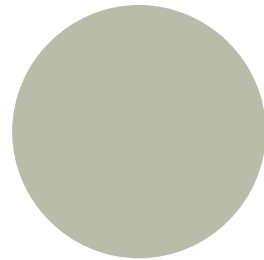
**3 SIMPLE STEPS
TO SAVE THE
WORLD**



COMPOBET

come up with a
recycled material

It was my dream to reduce the use of concrete, steel and polystyrene. Reduce your carbon footprint and the amount of garbage. And improve tissue building opportunities in the city



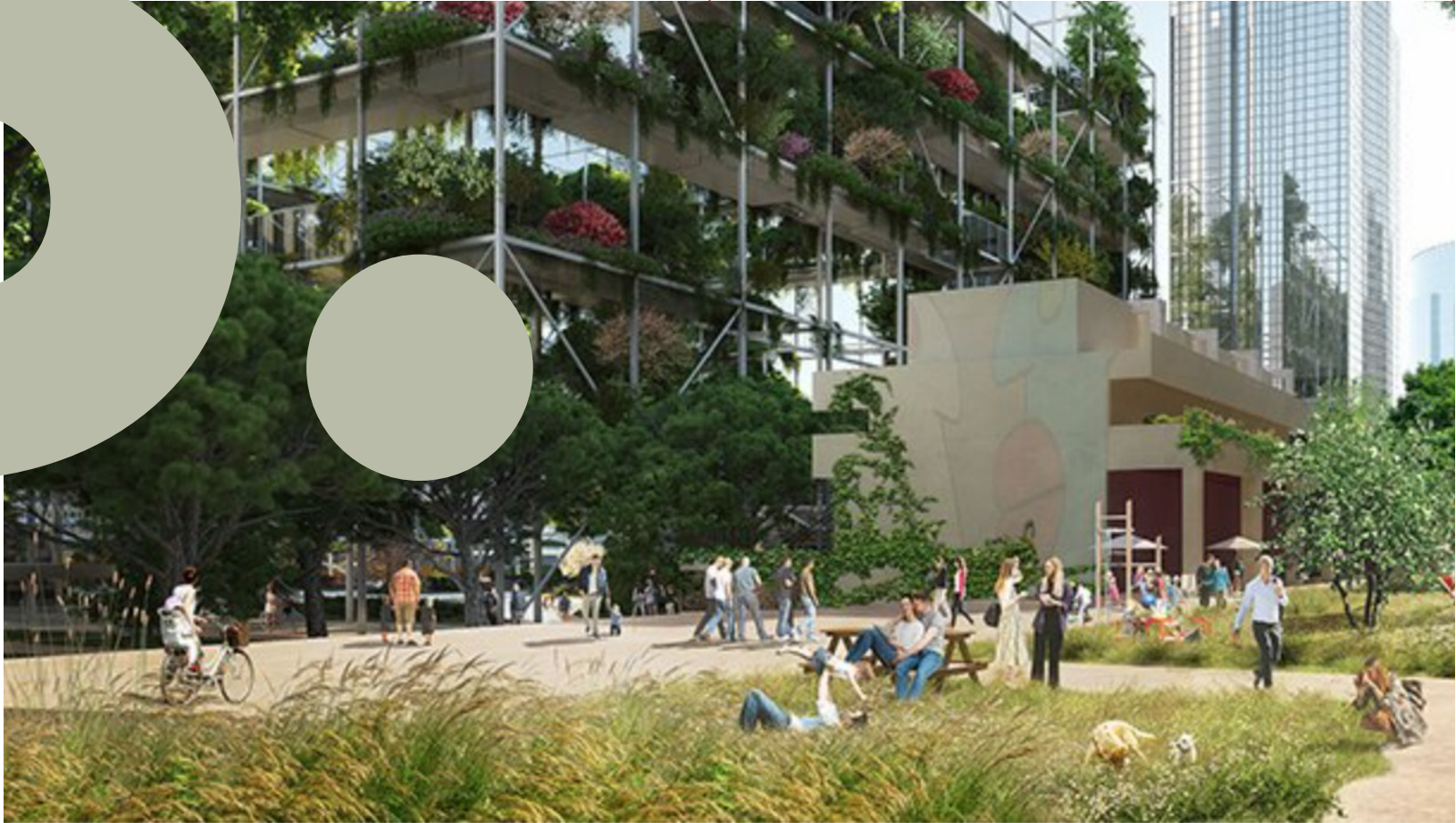
TESTS

conduct your research
successfully and
test the material

We did a composite test using the
construction standards for concrete

BUILD

build the missing
tissue in the city



Now, we can.