

Aalto University Campus

Landscape & Outdoor areas

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Aalto University
Campus & Real Estate

Aapo Pihkala, Project Manager, Sustainability and Landscape, ACRE

Photo: Mikko Raskinen / Aalto University

Otaniemi landscape 1950

Manor history, agriculture, fields, meadows, forests, tree alleys...

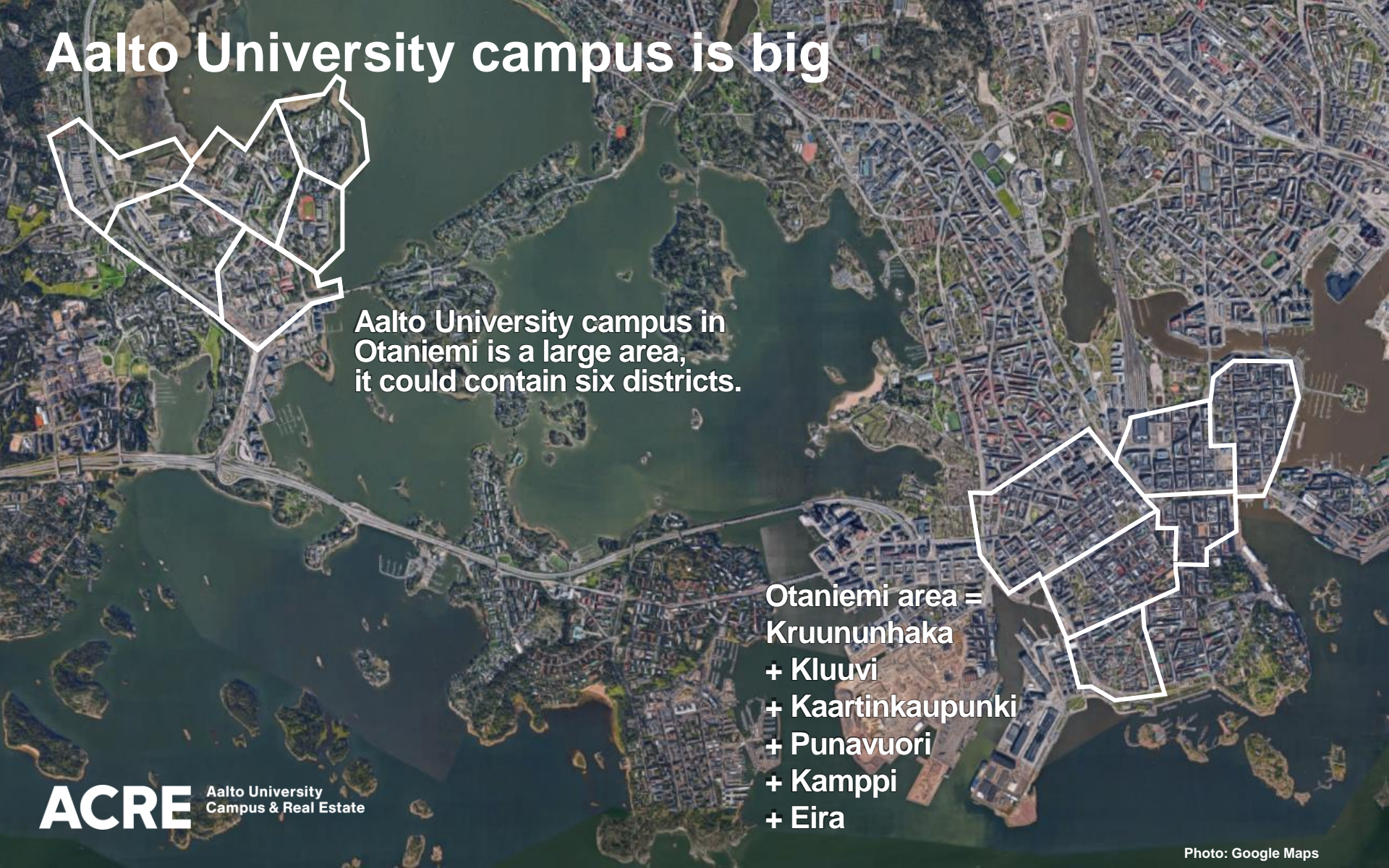
Otaniemi landscape 2022

Campus architecture, urban life, multidisciplinary collaboration, natural environment,
parks...

Aalto University campus is big

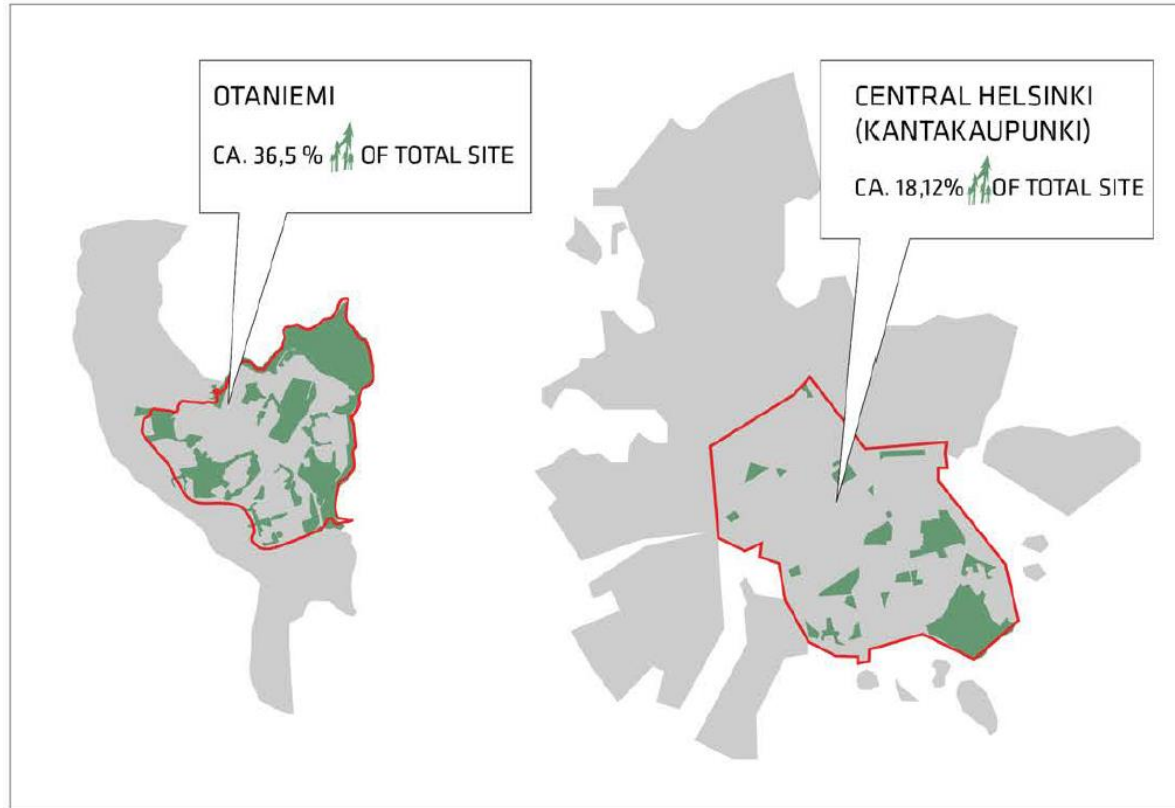


Aalto University campus in Otaniemi is a large area, it could contain six districts.



Otaniemi area =
Kruununhaka
+ Kluuvi
+ Kaartinkaupunki
+ Punavuori
+ Kamppi
+ Eira

Aalto University campus is green



OTANIEMI TODAY_EXISTING NATURE

SLA, 2018

“Campus of the forest”



Aalto University has the cultural heritage of modernist architecture



Architecture masterpieces + lush forest nature

What makes Otaniemi a unique campus?



Aalto campus landscape 2022

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PRELIMINARY SKETCH - NOT
DECIDED - UNDER PROVISION -
ARTISTIC VISION OF
POSSIBILITIES

A-konsultit / Tietoa Oy

Aalto campus landscape 2035



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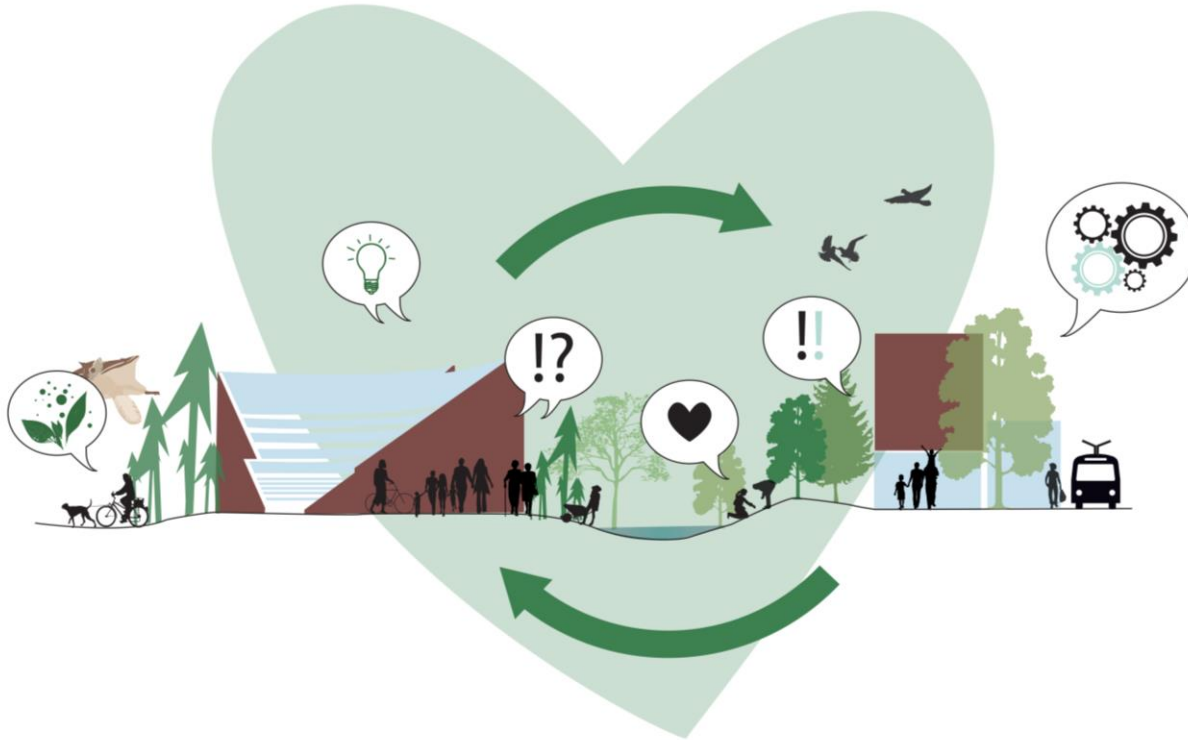
Conceptual landscape plan for Otaniemi

Bridging nature and sustainable urbanity



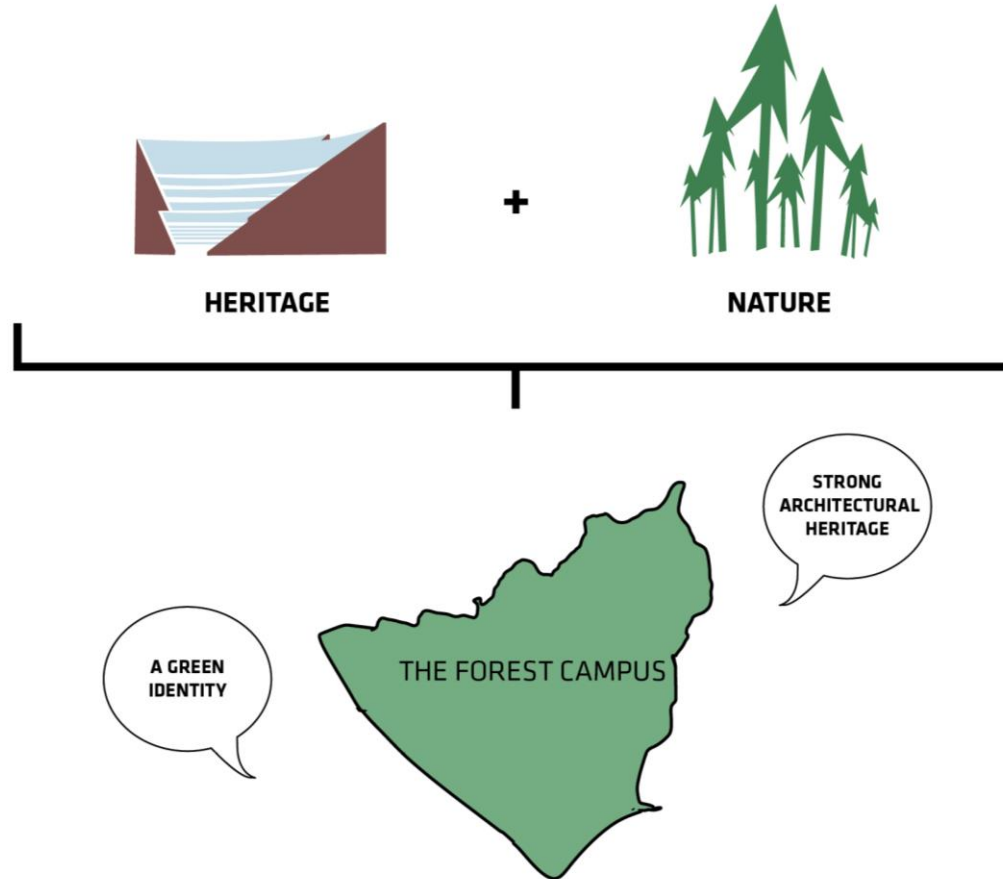
Campus vision

City of growth

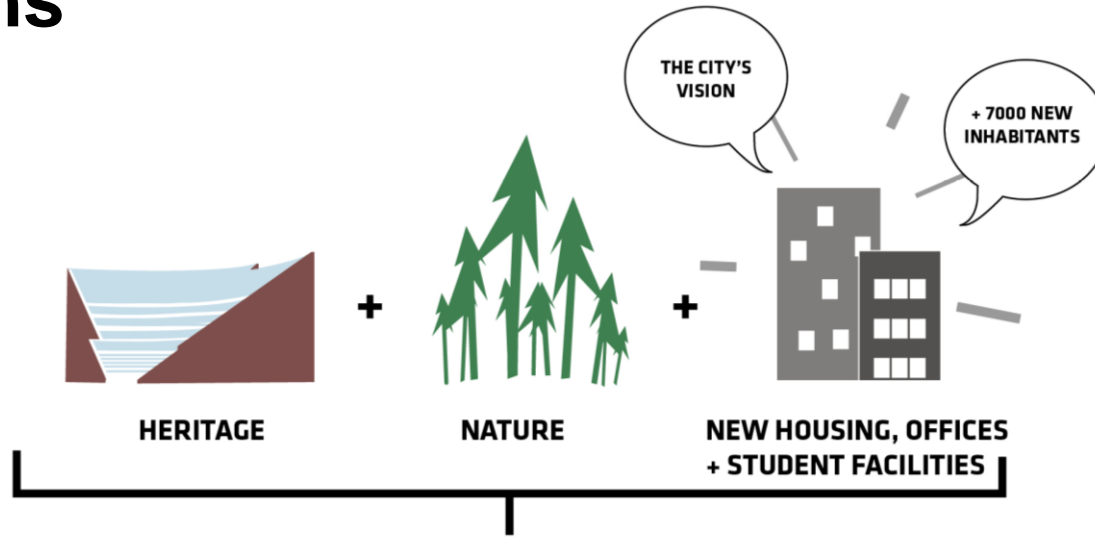


FROM CAMPUS SITE TO A GREEN CITY OF GROWTH

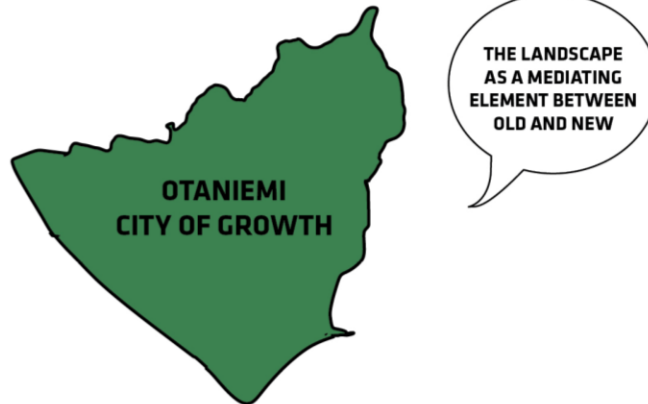
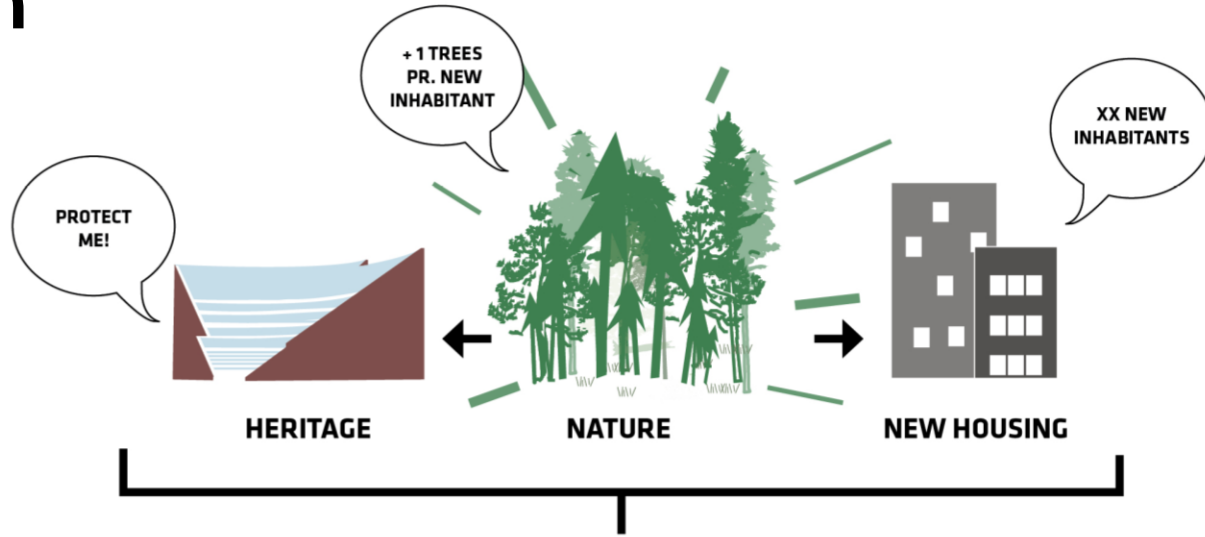
Otaniemi today



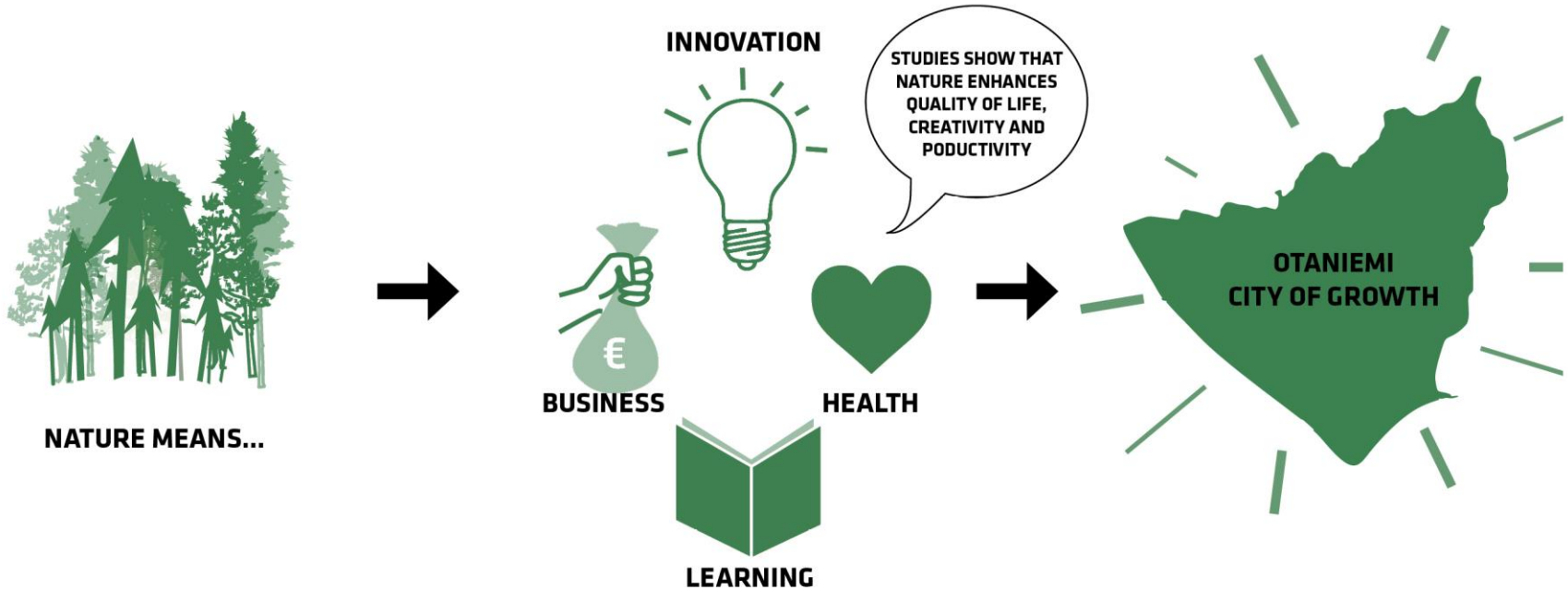
Future plans



Solution



Why is campus nature important?



Grown environment analysis

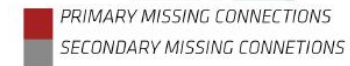
Characteristics



FOREST AND WETLANDS



BIOTOPES



FRAGMENTED NATURE

Landscape design

- THE GREEN SPINE
- DENSE FOREST
- THE URBAN SPINE
- THE URBAN LOOP
- THE OTANIEMI LOOP
- COLLECTED RAINWATER
- FUTURE PLANNED PROJECTS
- DENSIFICATION
- GREEN PARKINGLOTS
- INFRASTRUCTURE



Sustainable landscape principles

Added value through nature



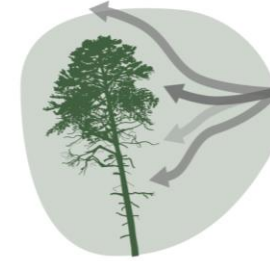
A ROOM WITH A VIEW

- People wish to live in green surroundings so planting trees generally adds value way above the money it costs.



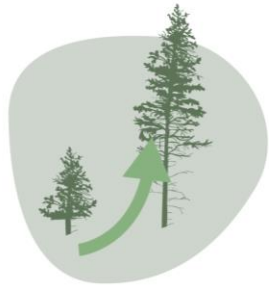
A WALK IN THE PARK

- Forest visits have been proven to lower blood pressure, reduce levels of stress hormones, increase the ability to concentrate and reduce ADHD in children. and it has been proven that living near street trees reduces children's risk of developing asthma. Additionally, people's risk of becoming obese decreases by 40% in cities with an abundance of trees.



WIND

- Introducing trees into big open spaces creates shelter, improving microclimates and, in turn, improving conditions for life between the buildings as the trees softly break the wind and dampen turbulence. they can save you up to 25% on your electricity bill, if you live in a windy spot and your house is poorly insulated.



MAINTENANCE

- Many people object against trees in cities and elsewhere by reason of the expenses related to maintenance. However trees only require a lot of maintenance if you insist on pruning them. If they are left alone to grow they can, in fact, provide several benefits:
 - temperature regulation, rainwater absorption and air pollution control



CLOUDBURST

- Trees absorb water during cloudburst's and helps the surroundings overcome the rainfall.



BIODIVERSITY

- By planting the right combination of trees, biodiversity is increased and the ecosystem is strengthened so it can sustain itself.

Biodiversity principles

Varied campus nature strengthens Otaniemi's resilience



SIZE

Larger natural areas have the potential to accommodate a more diverse biodiversity than smaller areas. The natural areas must have sizes that ensure a proliferation over time.

AGE

Existing nature is a potential for further development together with the establishment of new biotopes.

AVOID DIVISION

Breakdown of new and existing biotopes is avoided as it will weaken livelihood. For example, it is necessary that both flora and fauna pass through infrastructure.

CORRIDORS

Good connections between new and existing habitats are actively utilized. They are strategically linked to serve as a spreading corridor in the area.

BIODIVERSITY

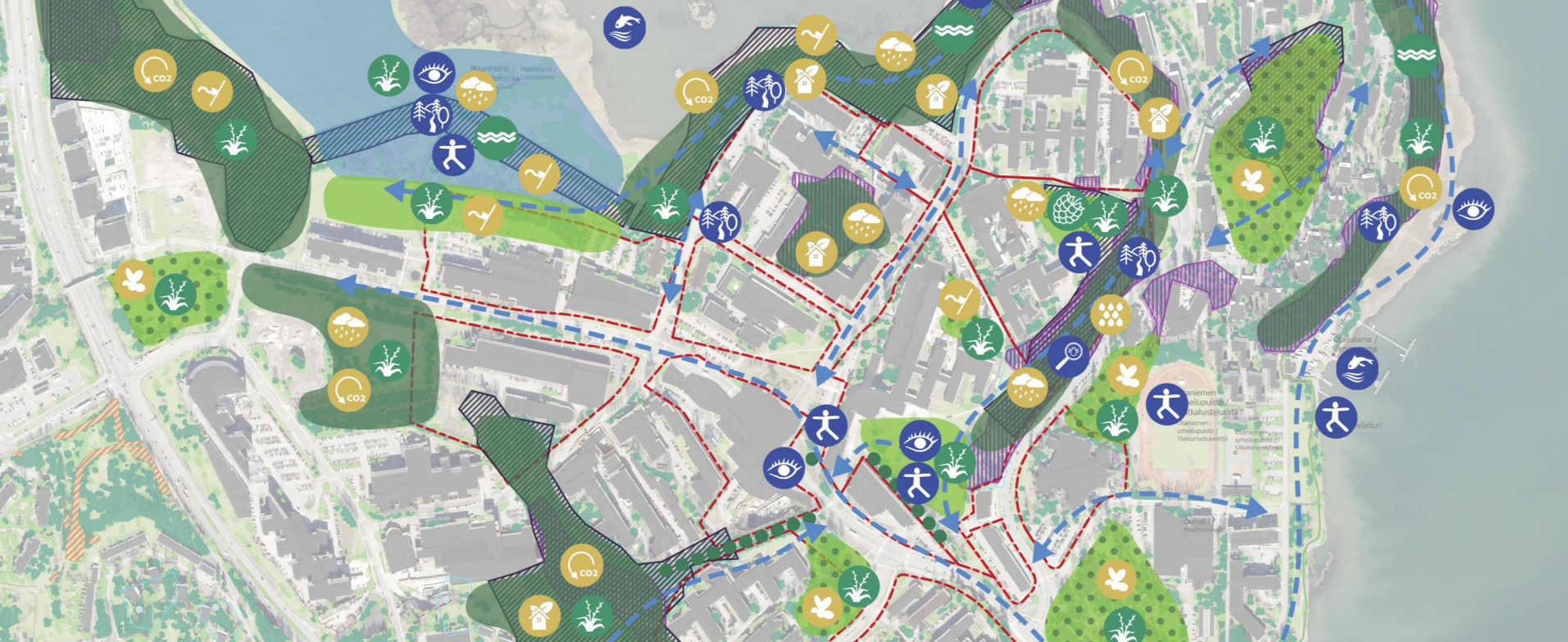
Large biotope variations are continuously associated with greater biodiversity. This secures a wide variety of species, types of forests, and moisture gradients.

VARIATION

By varying the size of the habitats, the livelihood of more species is safeguarded and a more diverse habitat variation is guaranteed.

Natural capital survey (2019)

Nature supports wellbeing and enhances the economic value



Natural capital mapping of Aalto University's campus by Ramboll Finland Oy. Description of the Otaniemi's natural capital and ecosystem services (2019), partial extracts.

Examples of campus outdoor areas



Campus parks = common living rooms

Places for meetings, thoughts and recreation + flood control



Manor history

Historic linden tree alleys tell the story of before campus

Laajalahti nature reserve

Nature preservation area next to campus



Otaniemi coastline

Green belt of the campus



Outdoor learning premises

Sustainable, radical creativity, practical biodiversity



Urban gardening

Local food production and community gardening



Trees as landmarks

Places for meetings and gatherings + local biodiversity



Future landscape projects

- Ampfitheatre square
- Dipoli outdoor areas
- Outdoor design guidelines (report)
- Alvar Aalto park
- Outdoor art locations
- Ossinlampi & surroundings (park)
- Aalto Works park
- Otaniemi-Loop (indicative location)
- Rakentajanaukio square
- Main Street

PRELIMINARY



Ampfitheatre square

Project completed autumn 2022



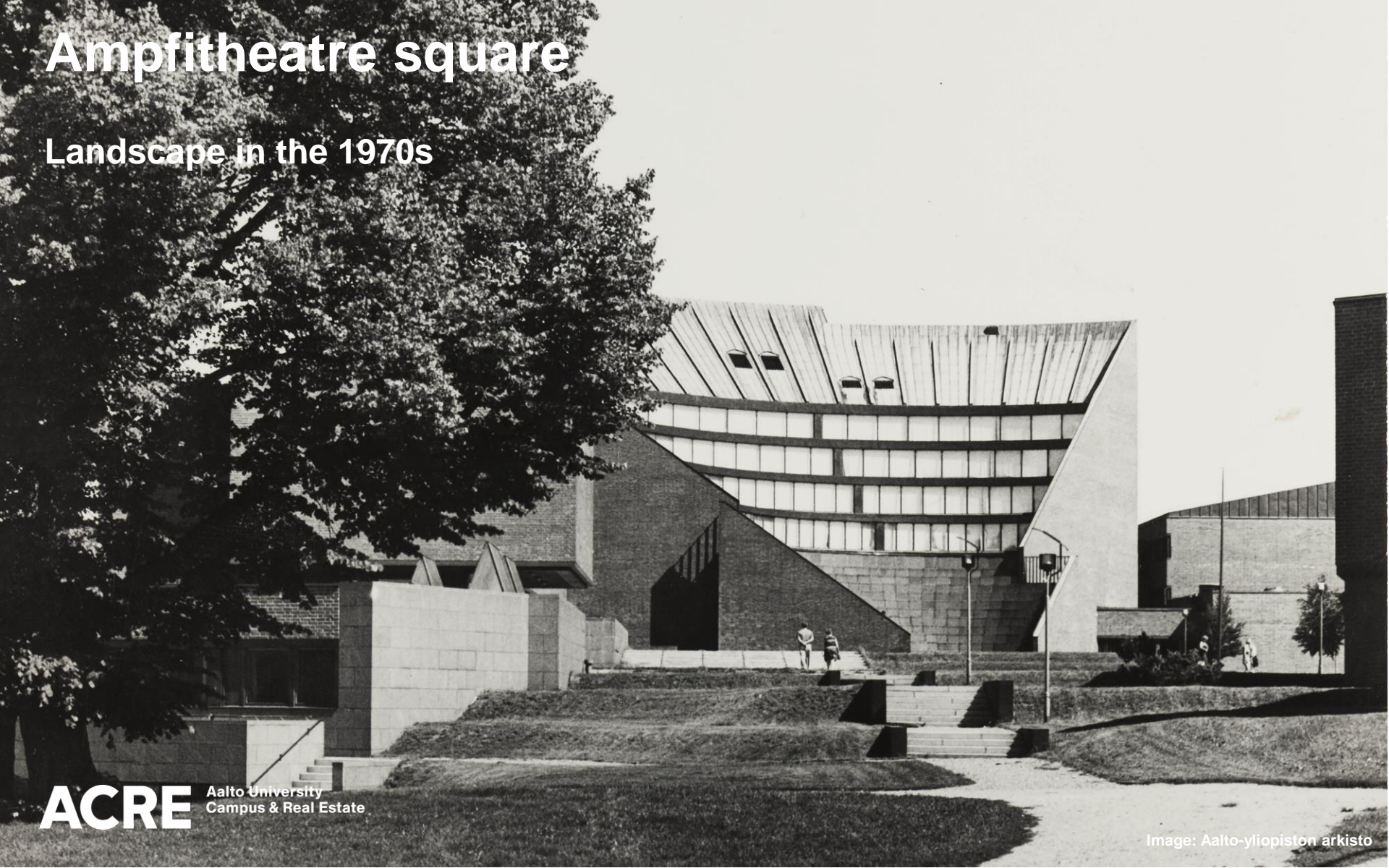
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POSSIBILITIES

Image: Masu Planning Oy

Ampfitheatre square

Landscape in the 1970s



Ampfitheatre square

Landscape in 2019



Ampfitheatre square

Landscape in 2022



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Image: Mikko Raskinen / Aalto University

Ampfitheatre square

Landscape in 2019 (after metro)



Ampfitheatre square

Landscape in 2022



Ampfitheatre square

The green areas include a decaying artwork of local trees.

Decaying wood is important for fungi, insects and forest birds.



Participatory budgeting 2021

Students voted garden benches as the winner



Participatory budgeting 2021

Pollinator-friendly plants and herbs were planted together with students



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Image: Parkly Oy

An aerial photograph of the Aalto University campus in Finland, showing a dense cluster of red brick buildings interspersed with lush green trees. A large, curved, modern building with a glass facade is prominent in the center. The campus is situated on a hillside overlooking a body of water. The text 'Thank you!' is overlaid in a large, blue, italicized font across the middle of the image.

Thank you!

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Aapo Pihkala, Project Manager, Sustainability and Landscape, ACRE

Photo: Suomen ilmakuva Oy / Aalto University