Fremtidens Katedraler: Grønne industrier og generøs infrastruktur

Designing with the invisible

18. April 2024
Signe Kongebro
Global Design Director, Urbanism

1

A4

Henning Larsen: Global designers with local roots

1959
Founded by Danish architect, Henning Larsen

2019
European Architect of the Year, awarded by The European Centre & The Chicago Athenaeum

30+
Countries where we have completed and ongoing buildings and masterplans

Design studios
Copenhagen, New York City, Munich, Berlin, Oslo, Hong Kong, Sydney, Singapore

750+
Architects, Urbanists, Landscape Designers, Sustainability Specialists, Interior, Lighting, and Graphic Designers

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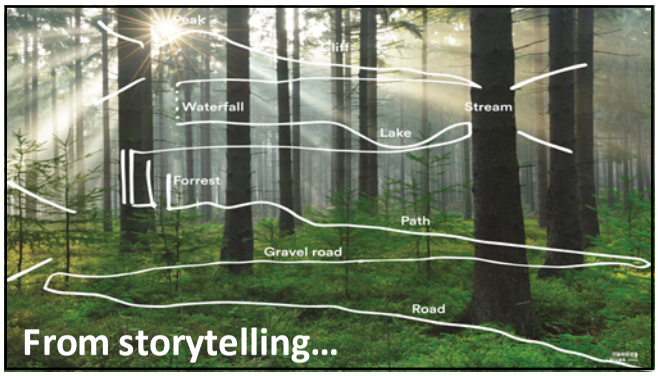

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...from digital craftsmanship

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...through prototyping

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...to "real" craftsmanship

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What is the role of urban design in an uncertain world?

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It is in urbanism that we imagine what we as a society can become

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"Cities are where the climate battle will largely be won or lost."
António Guterres
Secretary General of the United Nations

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More than 250 cities globally has a climate plan

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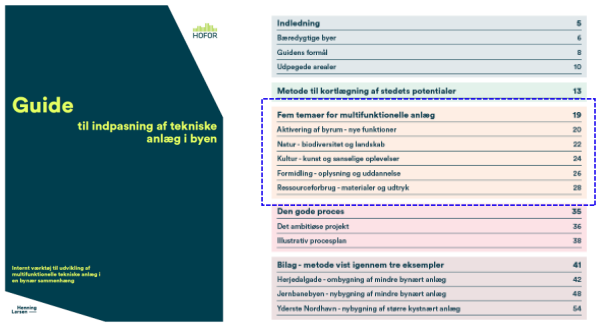

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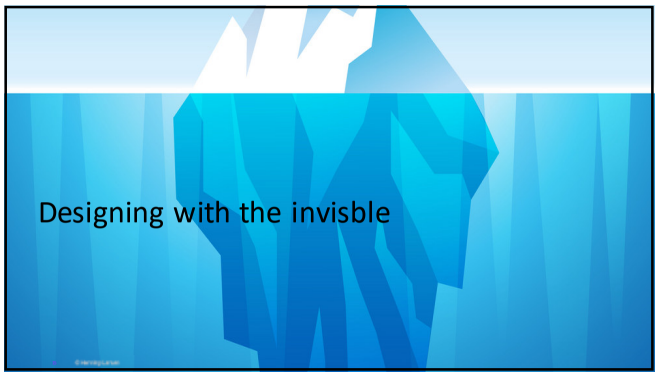

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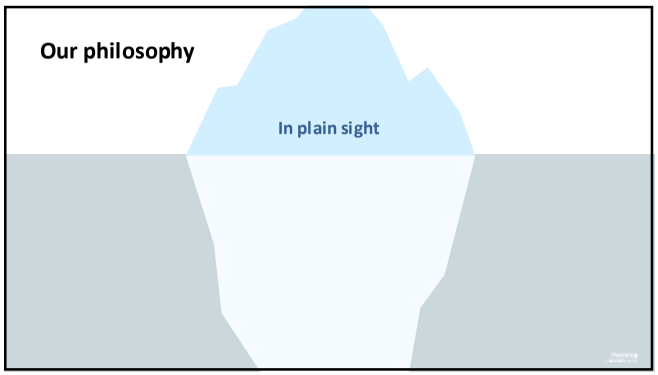

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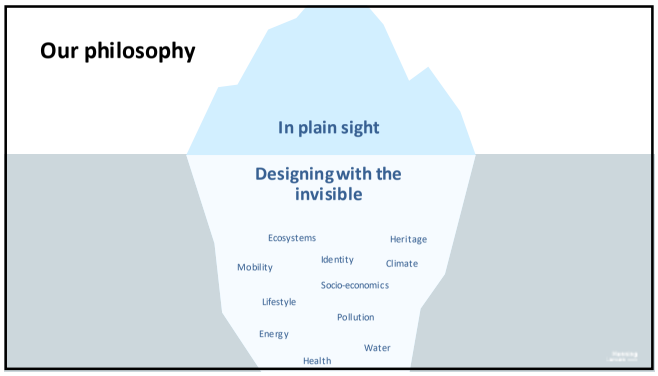

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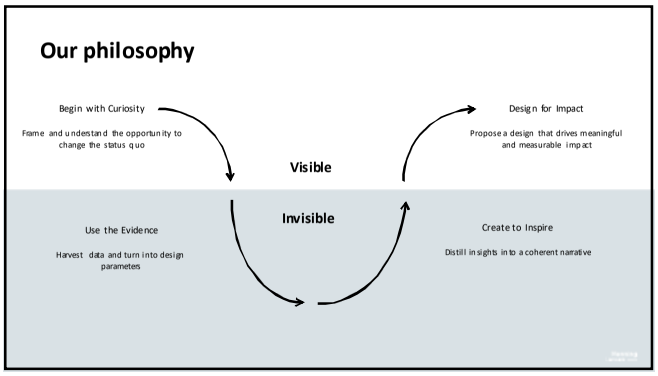

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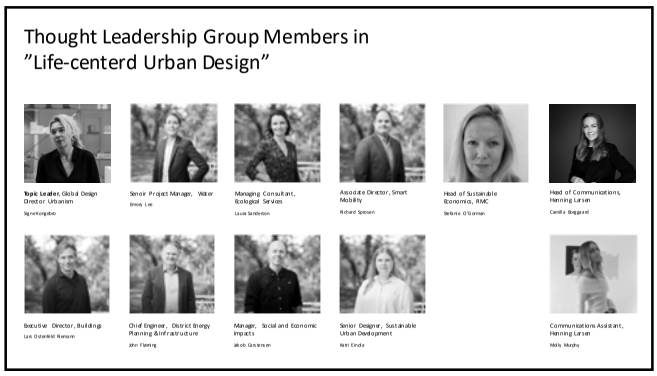

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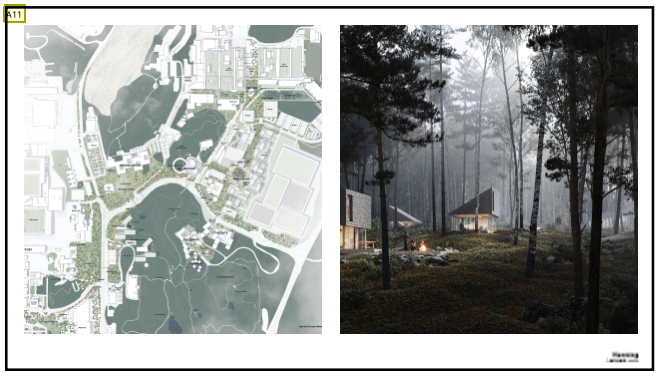

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Nye KPI´er for byer

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Decarbonization through
Urban Decarb ™

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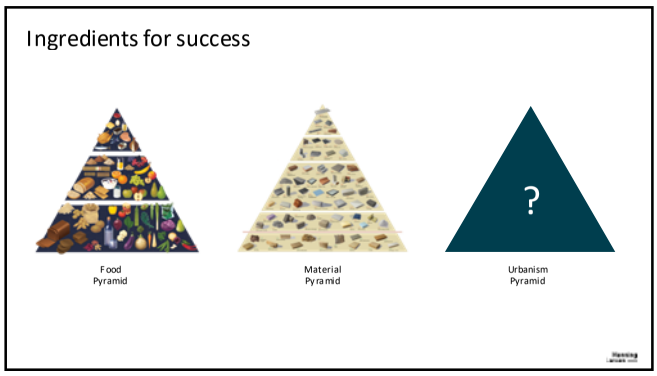

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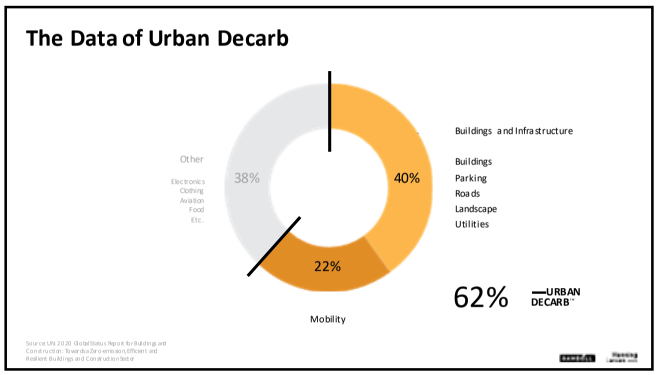

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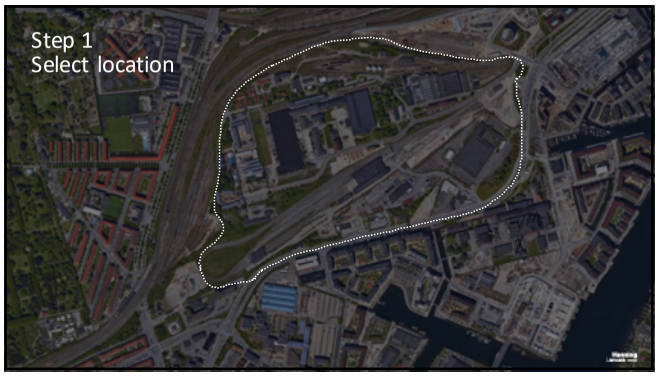

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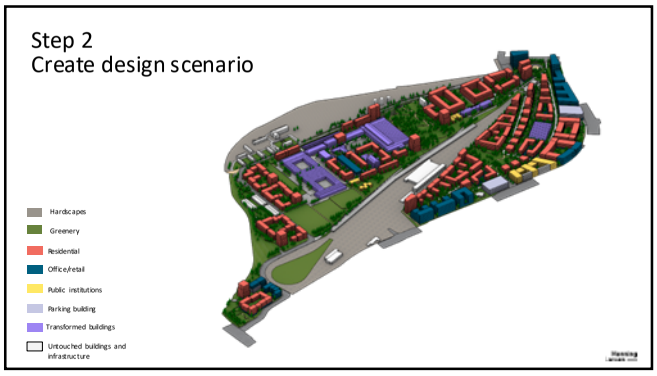

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Step 3
Visualize the carbon data

High 0 Low
Carbon footprint per m2

31

Step 4
Development of scenarios

Baseline conventional design ➡ Prioritize re-use of existing buildings and use of biogenic in new-built ➡ From grey to green: adding additional trees and nature

32

Potential:
Reduce 30-50% of carbon in urban design scenarios

33

New Destination
Aarhus Re-Water

34

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Aarhus Water Vision:

”We want to build the world’s most ressorce effeicient waste water plant”

35

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Aarhus Water Mission:

”The plant must handle more water and waste without increased environmental impact ”

36

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Aarhus Water Mission:

”The urban setting requires a close connection to recreational and commercial engagement”

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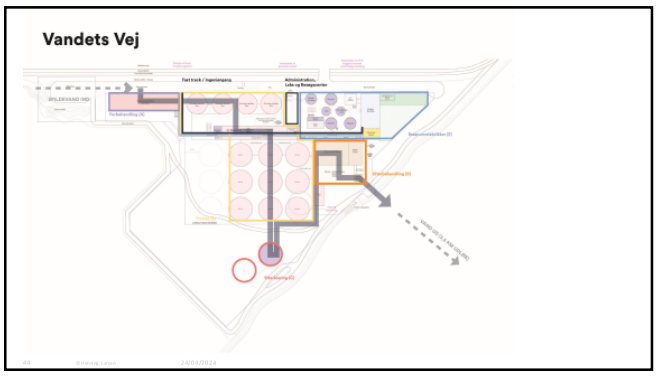

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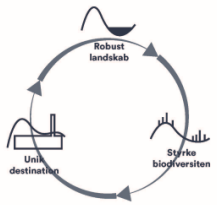

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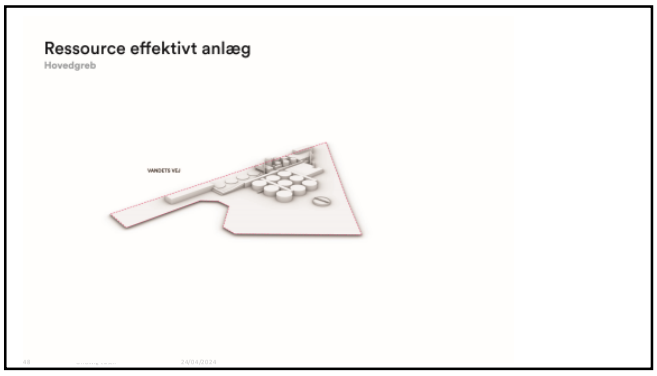

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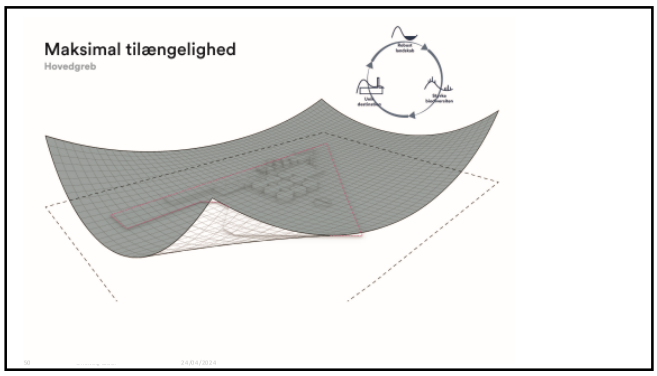

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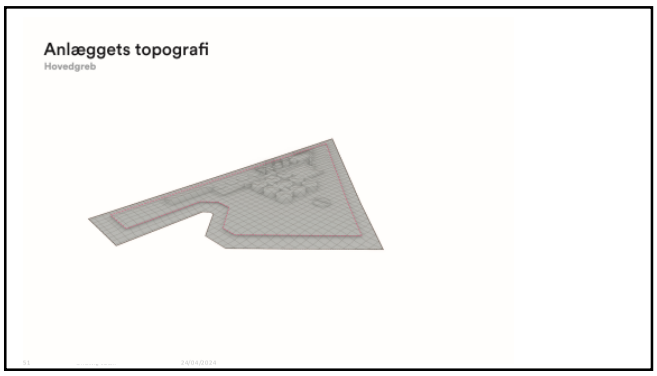

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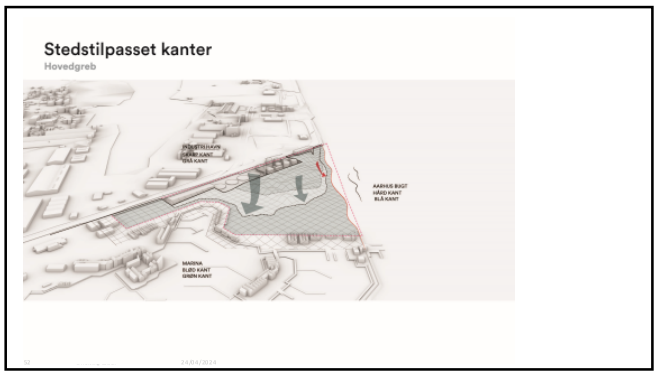

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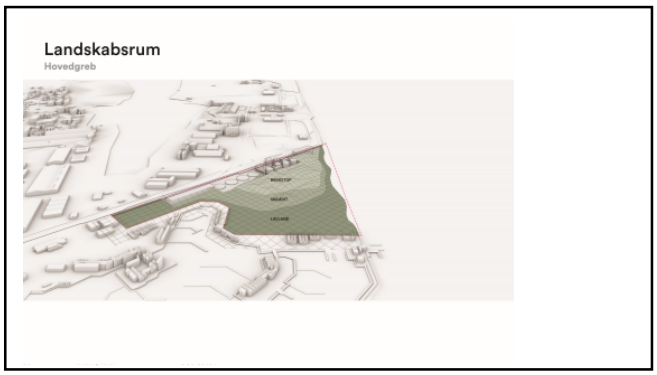

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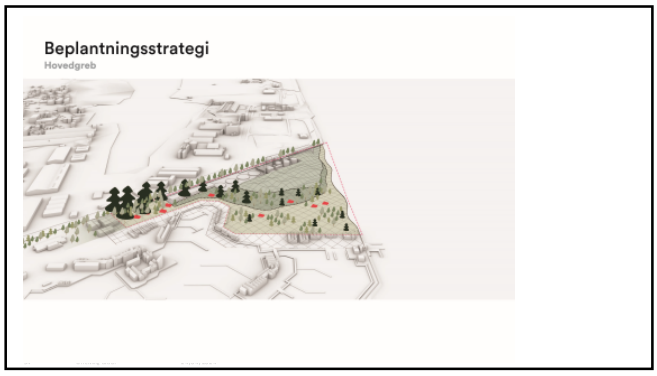

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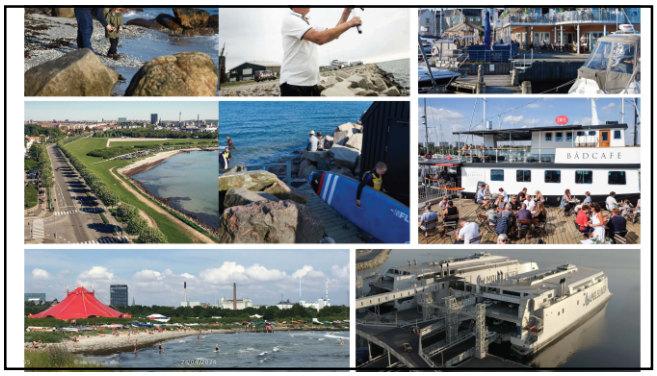

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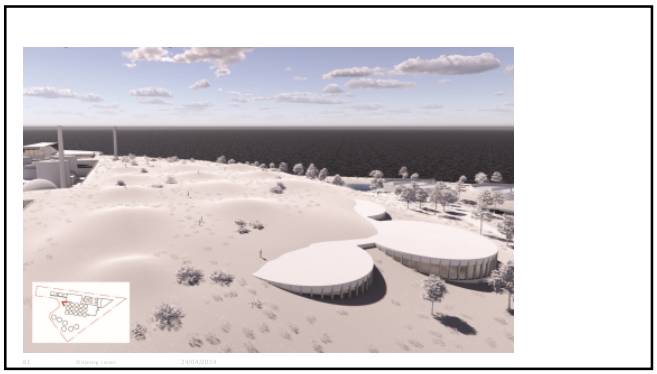

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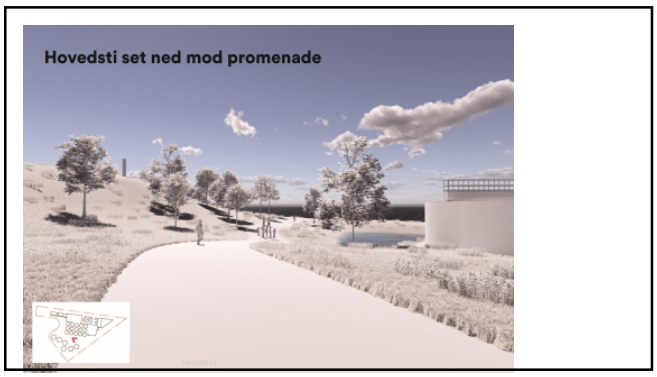

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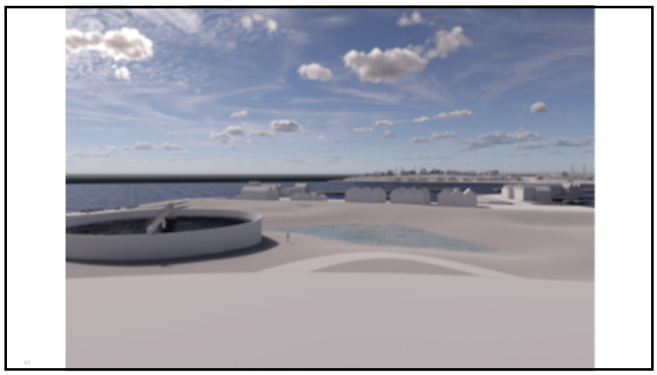

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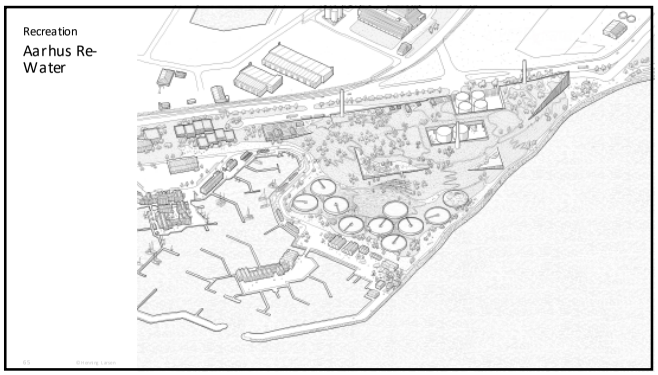

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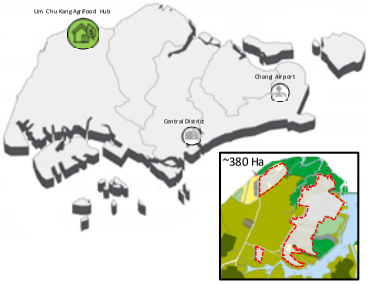
Strategic Impetus

- Strategic project of a national signature
- Pushes boundaries to reinforce Henning Larsen and Ramboll as sustainability leaders
- Build our track record of delivering integrated master planning projects in ecologically-sensitive sites
- New typology for future projects



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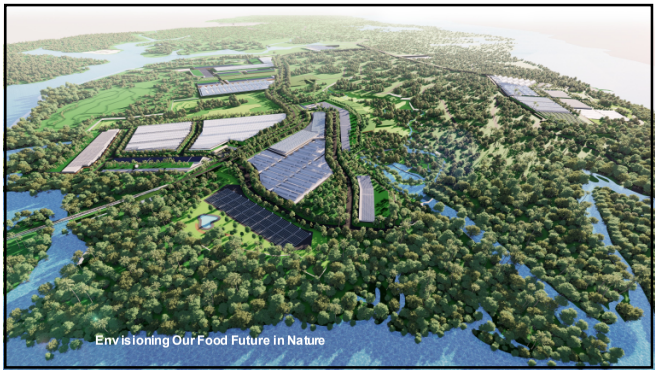

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Optimising Singapore's Farming Spaces

With less than one percent of our land areas set aside for agriculture, SFA has embarked on a holistic master planning of Lim Chu Kang into a productive, climate-resilient, and resource-efficient agri-food hub.

Artist's impression of Lim Chu Kang as an agri-food production hub.

Public engagement to co-create the LCK vision

Minister Grace Fu joining in the discussions at the physical session held at MSE Hall.

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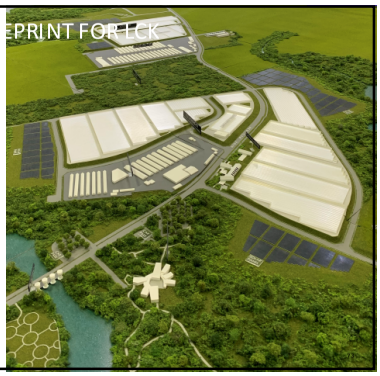
A TRANSFORMATIVE EPRINT FOR LCK

ENHANCING PRODUCTIVITY
Adopt advanced food production methods and increase production scale to achieve high-yield production

CREATING CIRCULAR RESOURCES PROCESS
Reduce carbon footprint through innovative, circular processes for use of energy, waste and water

ENABLING A RESILIENT DISTRICT
Future-proof against sea level rise through innovative site planning. Resource efficient processes to enhance resilience against potential resource disruptions

BUILDING AN ECOSYSTEM
Transform LCK into a highly productive agri-food hub, with shared facilities and utilities to enhance efficiency



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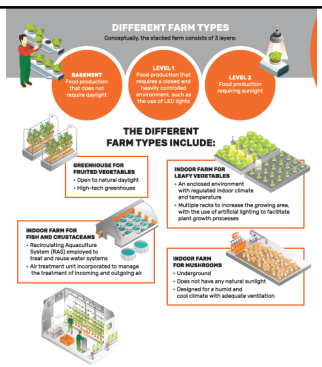
Best-In-Class Food Production

Embrace Technology and Smart Systems

Ensure Flexibility and Adaptability

Explore Integrative Farm Systems and Innovative Farm Typologies



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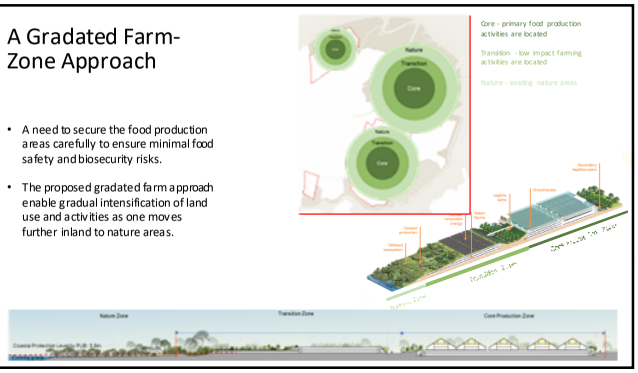
A Gradated Farm-Zone Approach

- A need to secure the food production areas carefully to ensure minimal food safety and biosecurity risks.
- The proposed gradated farm approach enable gradual intensification of land use and activities as one moves further inland to nature areas.



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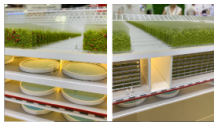
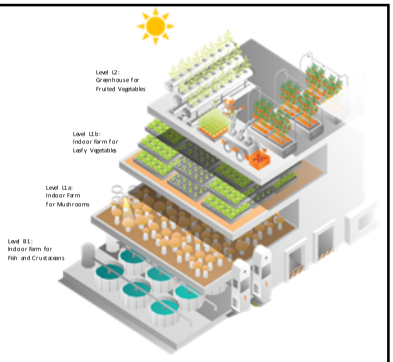
A Next Generation Stacked Farm Typology

Producing more on less

Different food production taking place at different levels





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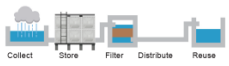
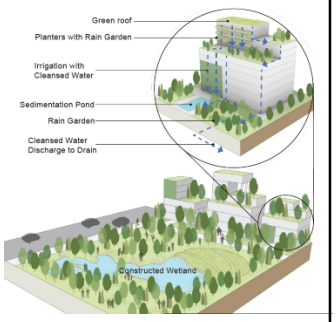
- Management of stormwater not just from perspective of buffering discharge into the national drainage system, but also strategic storage, treatment and distribution for subsequent irrigation uses.





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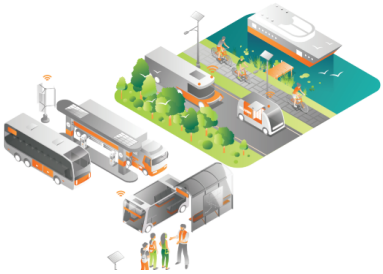
Logistic Support: Moving Towards A Car-Lite District

In line with the Singapore Green Plan 2030 and the Land Transport Master Plan 2040, the future LCK is envisioned to be a car-lite district.

Wider transport options for staff and recreational users

Workers and visitors can opt for public transport over private car trips

Greener transport system with the use of electric vehicle options



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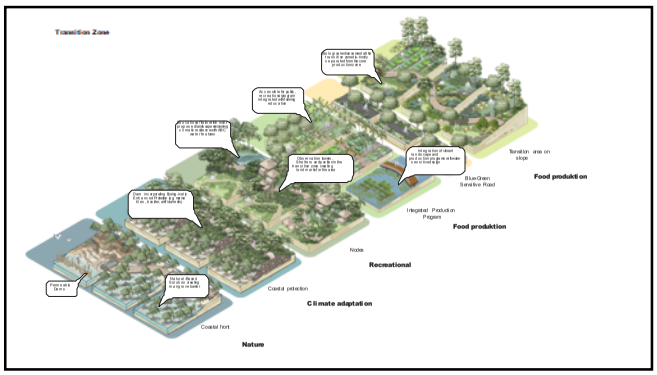

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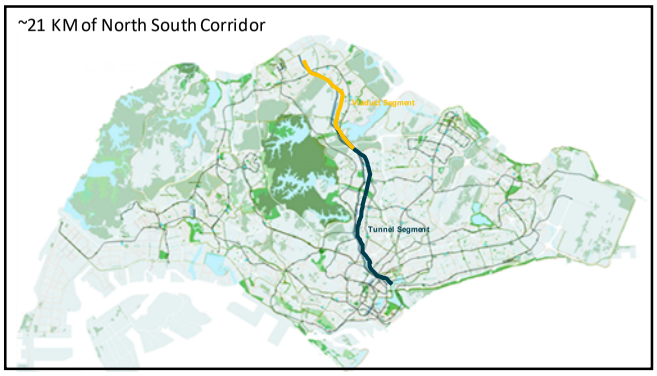

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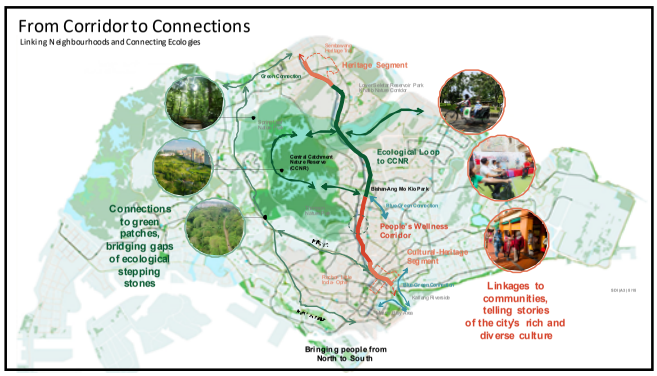

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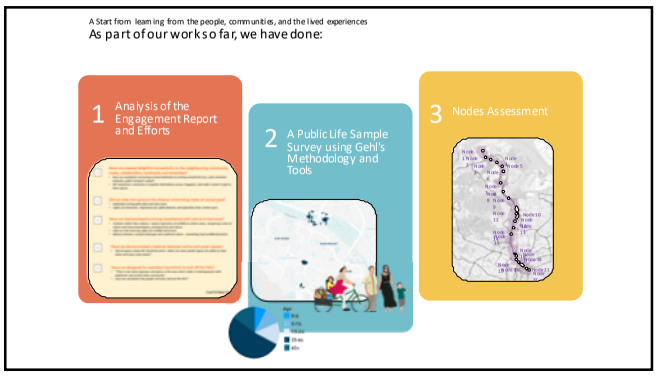

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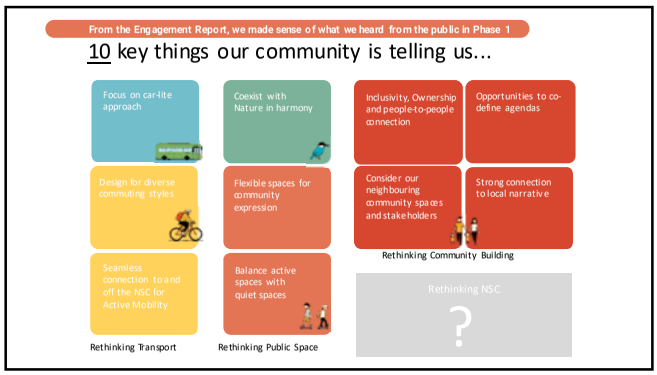

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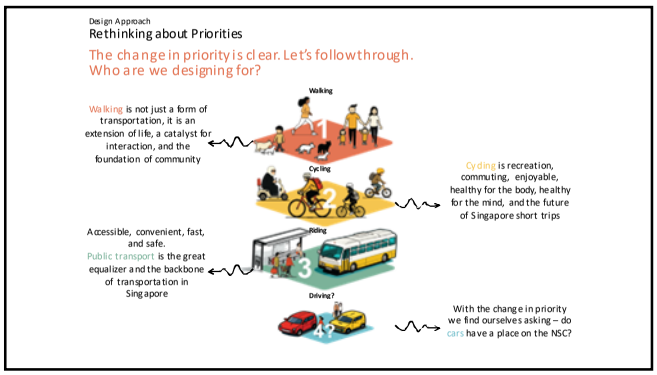

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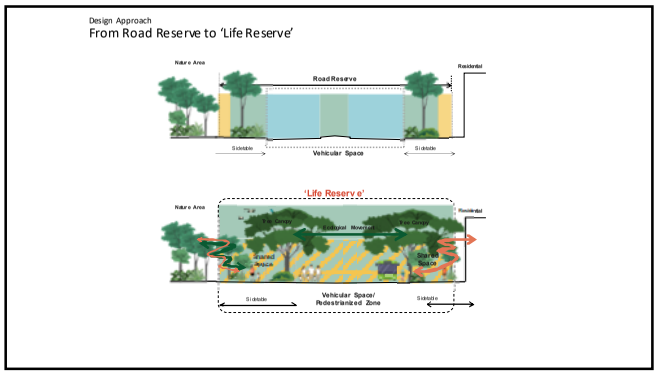

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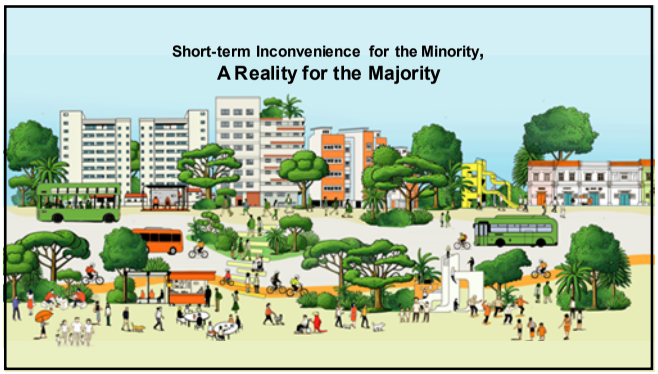

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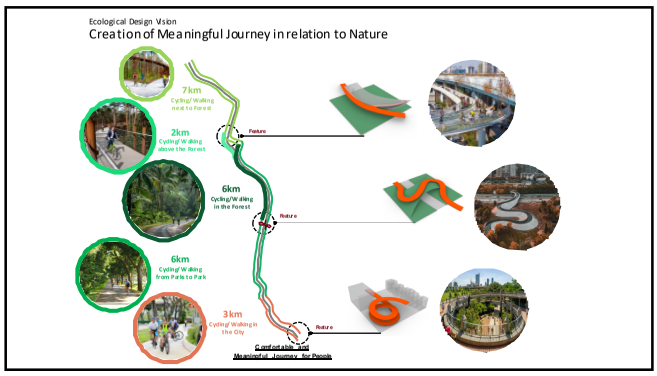

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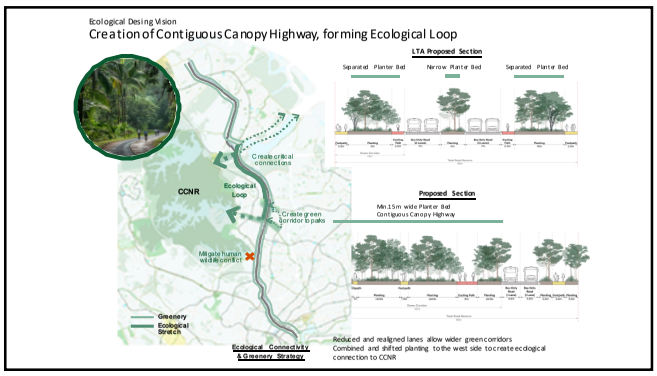

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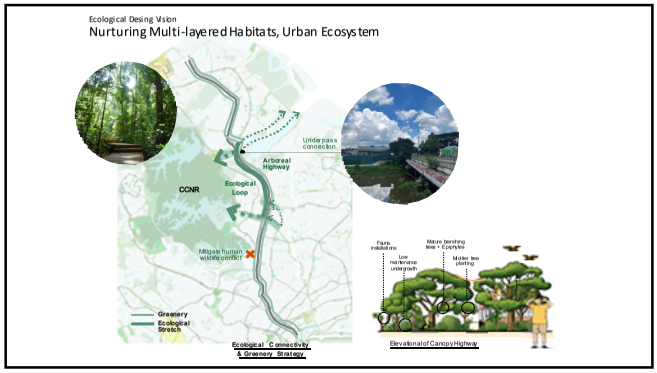

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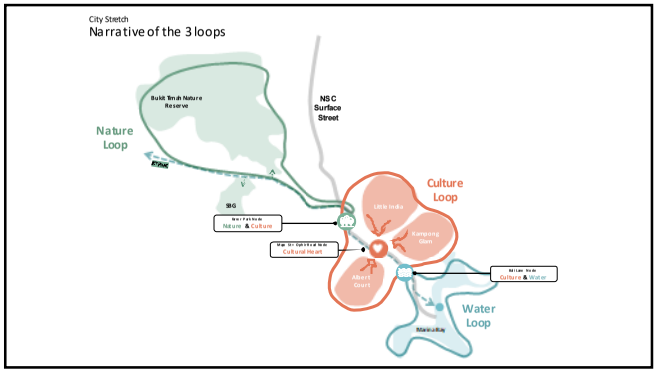

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Anbefaling #1

Skab oplevelser for borgerne
- I kan levere instamoments for den grønne omstilling

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Anbefaling #2

Opret byudviklingsenheder og omlæg jeres kommunikationsbudgetter

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100

Henning Larsen

Tak

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