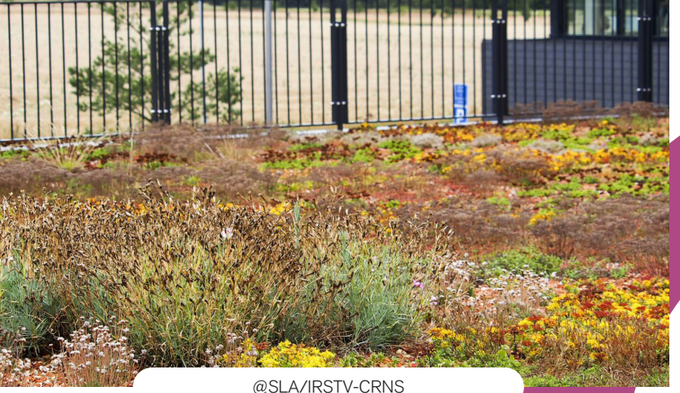


@SLA/IRSTV-CRNS

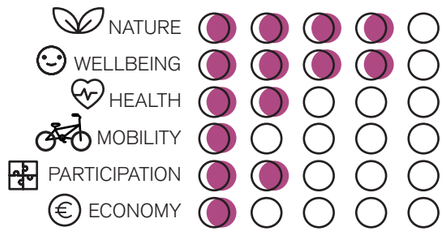
@SLA/IRSTV-CRNS

@SLA/IRSTV-CRNS

NBSterr3

GREEN ROOFS

CHALLENGES ADDRESSED



IMPLEMENTATION

SOFT	MEDIUM	HARD

REPLICATION POTENTIAL/FLEXIBILITY

LOW	MEDIUM	HIGH

AMORTIZATION PERIOD

SHORT	MEDIUM	LONG	NA

INVESTMENT

LOW	MEDIUM	HIGH	NA

GREEN ROOFS

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DESCRIPTION

Green roofs serve several purposes for a building, such as absorbing rainwater, providing insulation, creating a habitat for wildlife, increasing benevolence and decreasing stress of the people around the roof by providing a more aesthetically pleasing landscape, and helping to lower urban air temperatures and mitigate the urban heat island effect.
The roof of a building, a parking lot or some other build structure can be covered by vegetation that grows over an impermeabilization membrane and a soil substrate. Intensive green roofs are suitable for human use and flow of people. Extensive green roofs are not suitable for human use but require low maintenance and can have major ecological and economic benefits.

INNOVATION ASPECT

- Integrates build structures in the development of urban green spaces;
- Provides important ecosystem services e.g., rainwater management, heat island mitigation, and increased biodiversity;
- Provides green spaces in dense urban environments;
- Mitigates climate changes by creating better microclimate in dense urban areas.

REPLICATION AND SCALABILITY

- Substrates and base structures are standardized;
- The green roof design is dependent on the underlying load bearing structure. Extensive green roof types are more scalable than intensive because they are lighter;
- Green roofs can be established on both small and large structures.

PARTICIPATION PROCESS

CO-DIAGNOSTIC
-

CO-SELECTION
Citizens can participate in identifying needs and potential roofs in the district.

CO-DESIGN
Variables such as materials, vegetation and functional programs can be developed in collaboration with citizens, while the base-design of green roofs are quite technical and standardized. The load bearing structure will quite likely be a limiting factor when installing a green roof on an existing structure, and this should be investigated prior to a co-design process to ensure realistic expectations concerning the possibilities.

CO-IMPLEMENTATION
Citizens can help with plantings and plants management.

CO-MONITORING
Plant identification, plant density, substrate moisture, water drainage below the substrate.

BEST PRACTICES and REFERENCES

LINKS:
https://sla.dk/en/projects/amagerbakke
https://sla.dk/en/projects/budolfiplads/?countryoverride=lswitch
https://sla.dk/en/projects/sundnaturepark
https://sla.dk/en/projects/novo-nordisk
https://sla.dk/en/projects/dr-citys-inner-courtyard/?countryoverride=lswitch

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