

ENergy harVesting by Invisible Solar IntegratiON in building skins



ENVISION will develop and demonstrate an integrated renovation concept exploiting all the available building surfaces (both vertical and horizontal, transparent and opaque) for thermal and electrical energy harvesting.

The ENVISION solutions focus on absorbing the invisible part of the solar radiation, the near-infrared (NIR), allowing at the same time the visible and esthetical aspects to be retained.

Thanks to ENVISION it will be possible to exploit the currently unused 60 billion square meters of facades existing in the European union, contributing to create a new generation of energy positive buildings

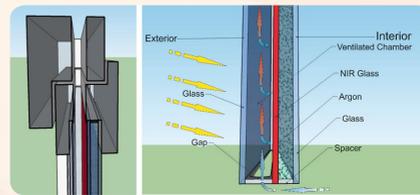
TECHNOLOGIES

Opaque Surfaces



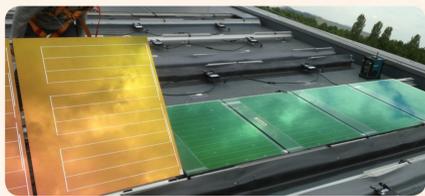
Solar heat collectors based on the usage of NIR absorbing coloured coatings

Transparent Surfaces



Smart ventilated heat harvesting window

Opaque Surfaces



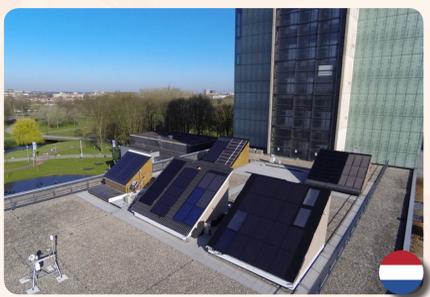
Covered solar heat collectors using colored NIR transparent glasses

Transparent Surfaces



PV harvesting glasses

DEMONSTRATION



SOLAR-Beat (Netherlands)



BESTlabs (France)



Vosmaerstraat Apartments, Delft (Netherlands)



University of Genoa Savona Campus (Italy)

www.energy-envision.eu

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