

# DYNAMIC SIMULATIONS OF BUILDING INTEGRATED PV

ZIN IN NOORD: A CASE STUDY

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### INTRODUCTION

#### BASIC PV ROOF INSTALLATIONS





#### BUILDING INTEGRATED PV





### ZIN IN NOORD

#### PROJECT INFORMATION



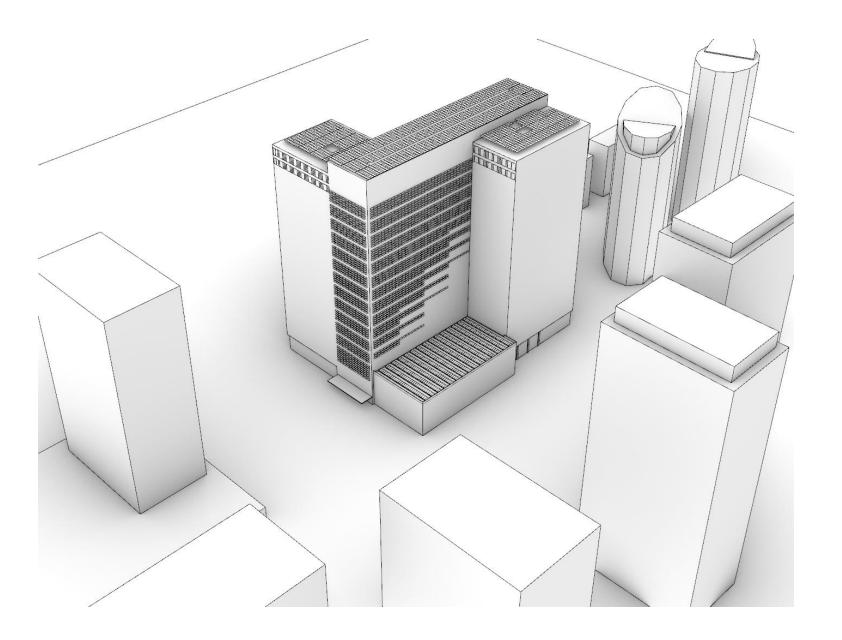
- Redevelopment of WTC 1 and 2 towers in Northern Quarter of Brussels
- Multifunctional project of 110.000 m<sup>2</sup> above ground
- Functions:
  - Offices for Flemish Government
  - Hotel
  - Apartments
  - Sports hall and fitness
  - Coworking spaces
- Reducing primary energy by geothermal energy, energy exchange between functions and BIPV





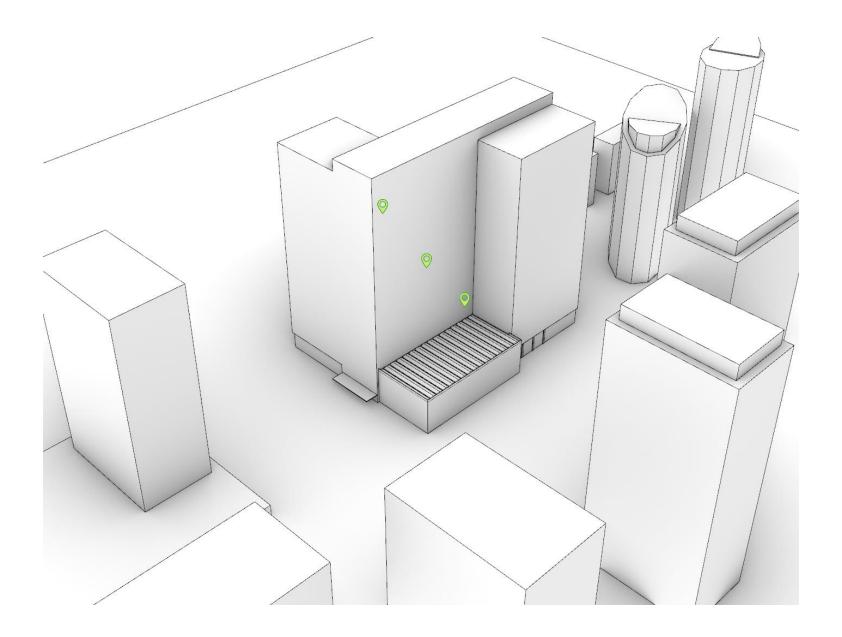




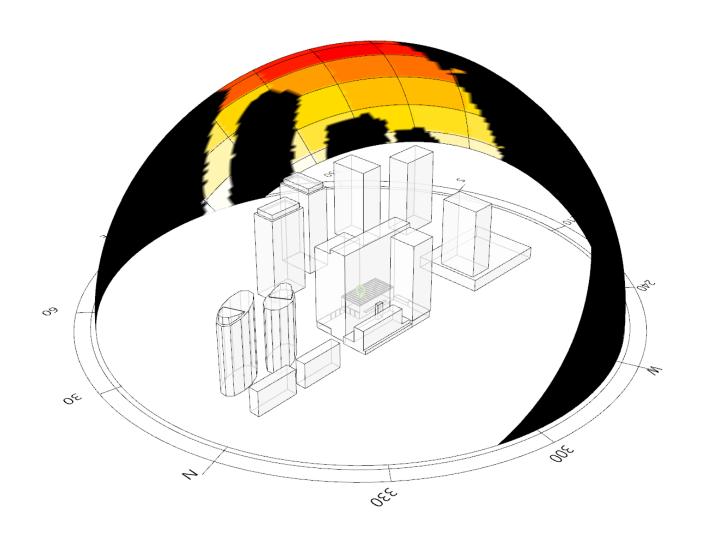


### SHADING DOME

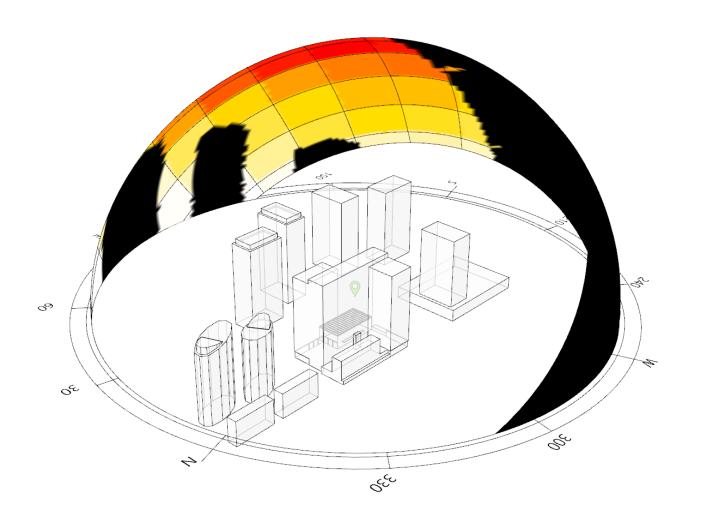




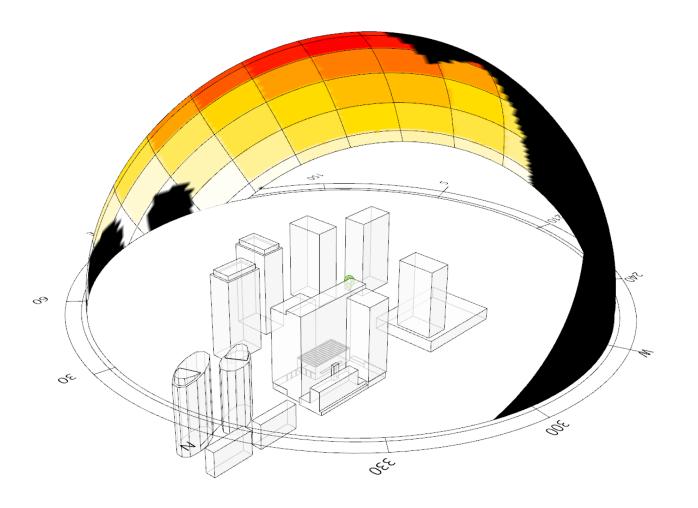






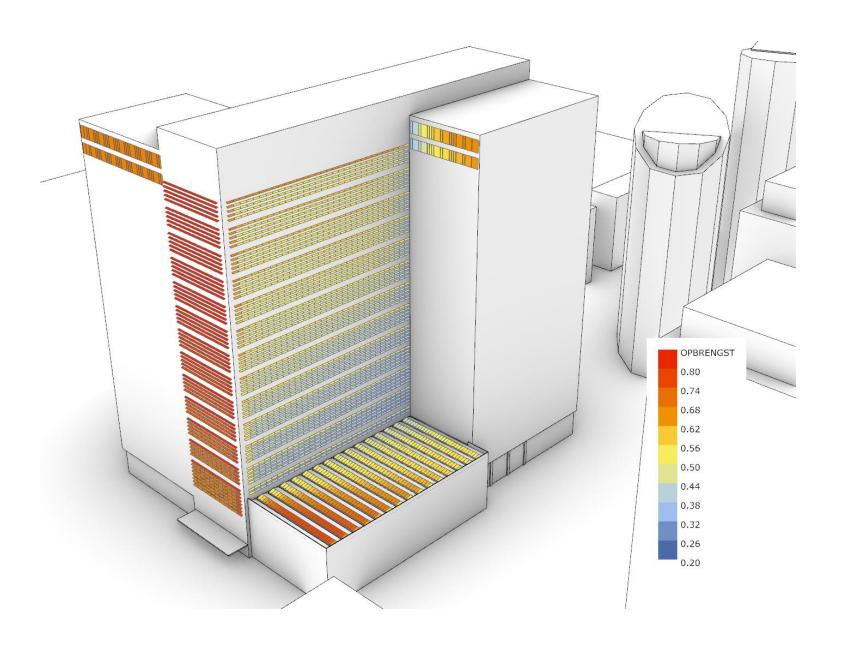




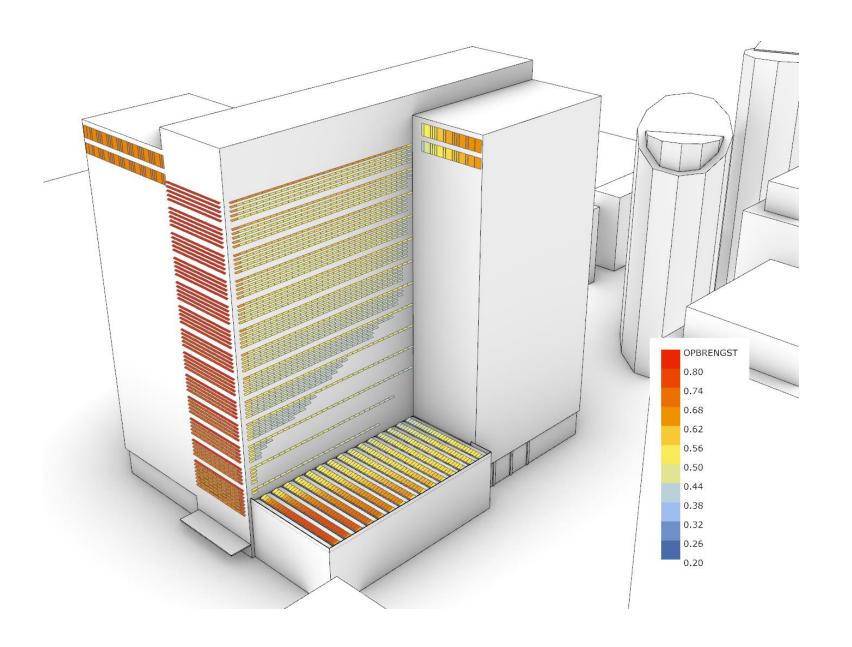


### **BIPV DESIGN**

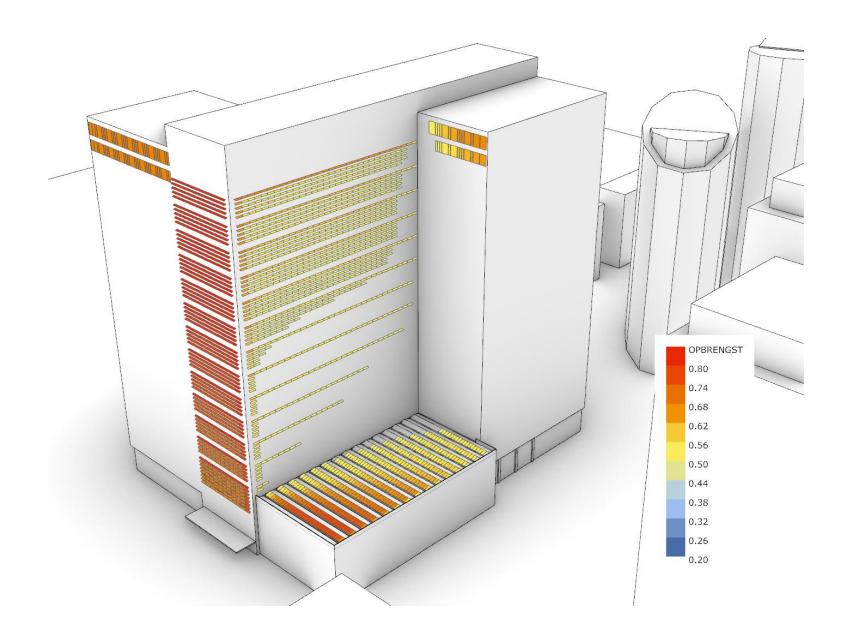




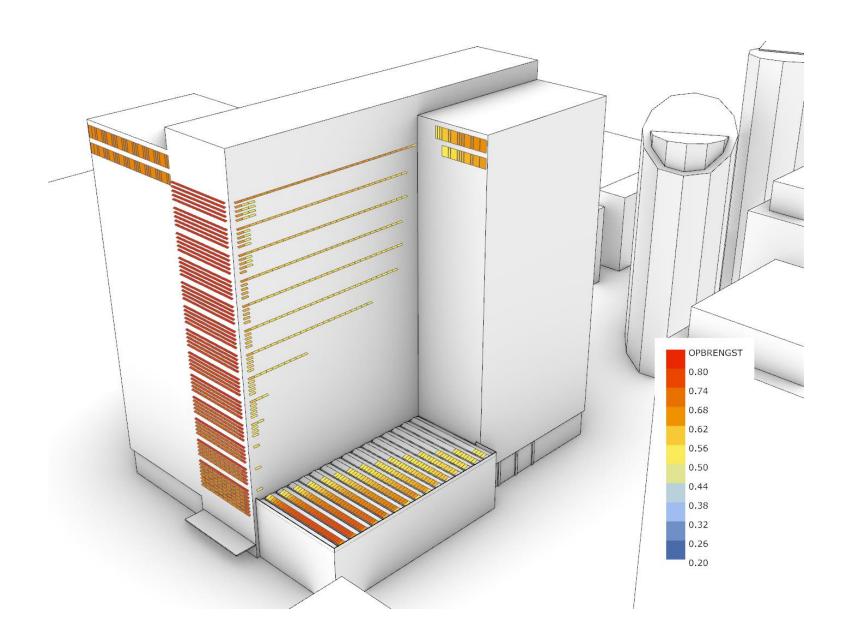




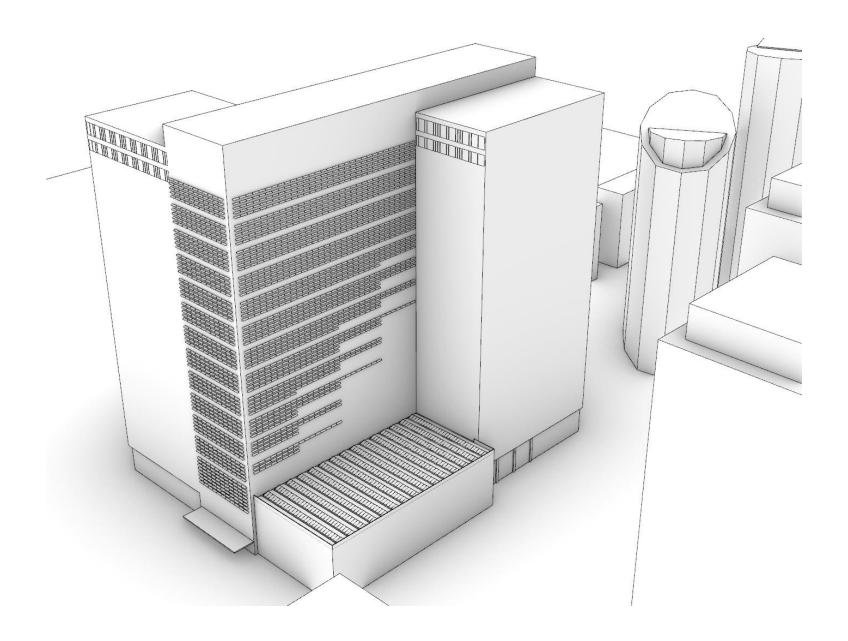










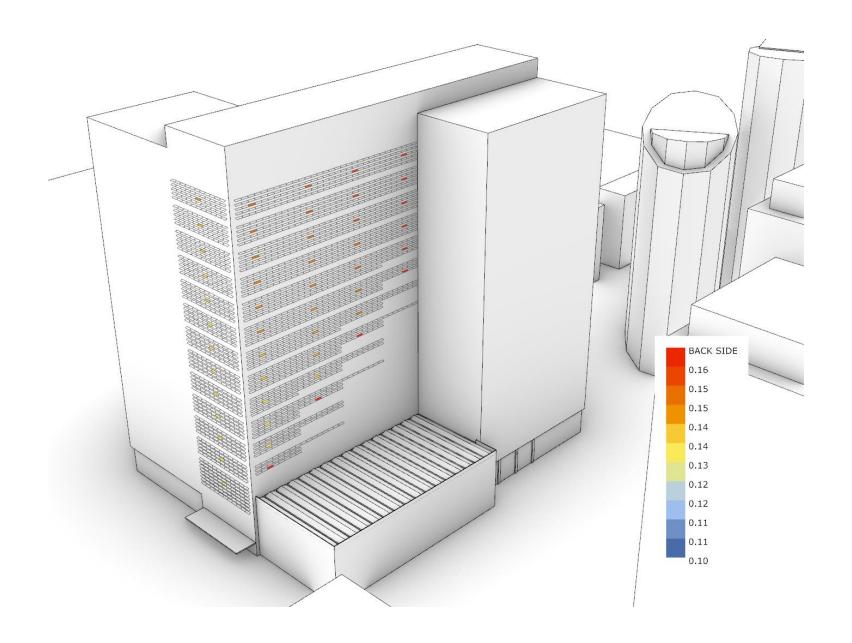


### BIFACIAL PV PANELS











## **THANK YOU**