



Transforming Fábrica de Gas da Matinha

LISBON

LISBON 1 | ALFACINHA

Khadija Benis

Sera Tolgay

Irmak Turan

LISBON 2 | PVent

Simone Cenci

Sara Freitas

Shreejay Tuladhar

Alpha Yacob Arsano

CONTEXT | TAGUS RIVER

Part of the landscape

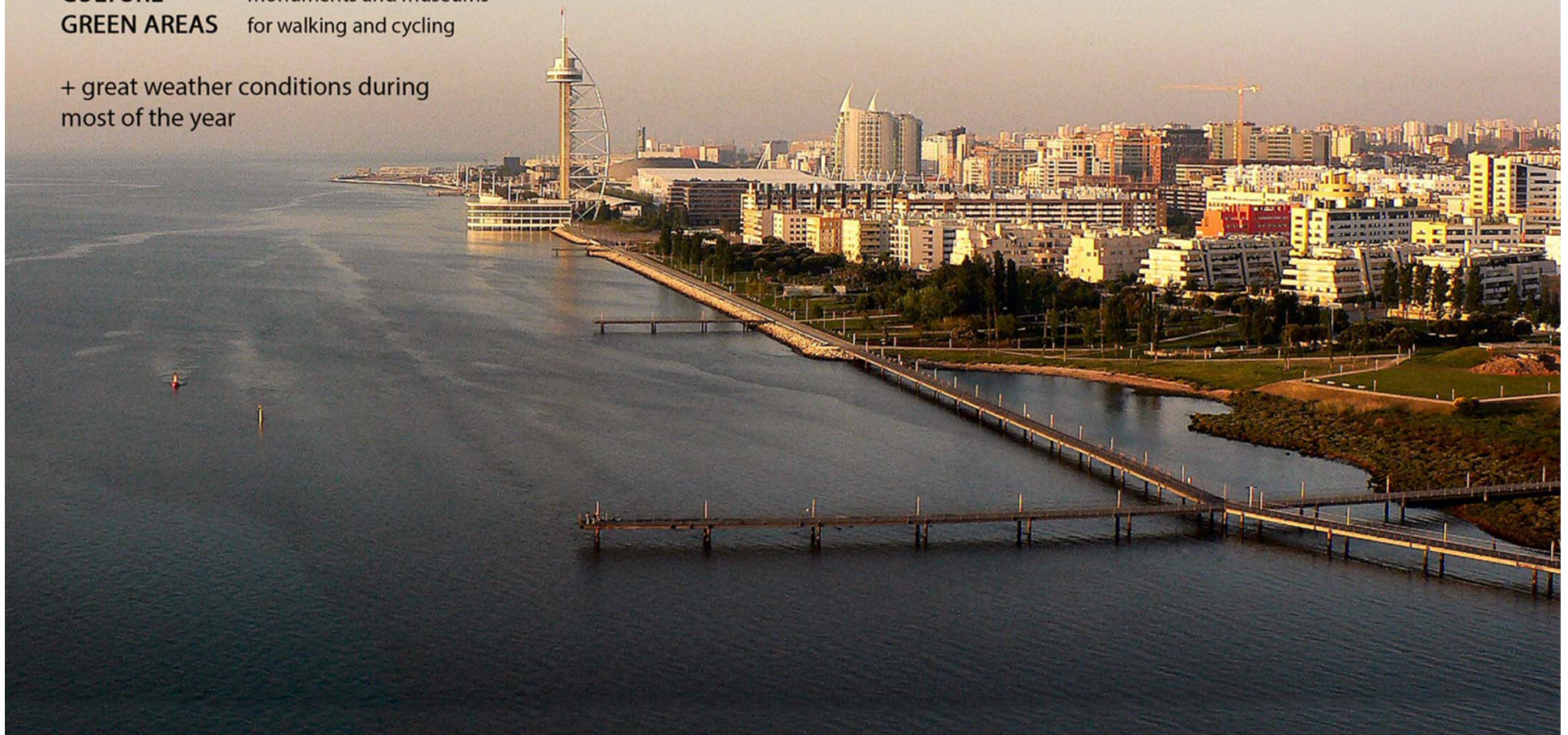
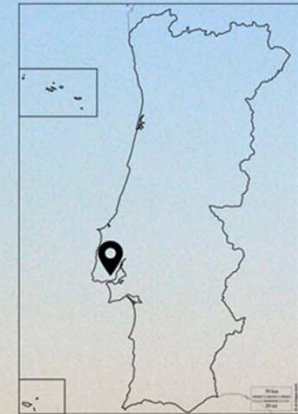
LISBON CITY | 600K inhab

LISBON METROPOLITAN AREA | 2.8M inhab
(more than 1/4 of Portuguese population)

Estuary of Tagus River | 19 km of riverfront

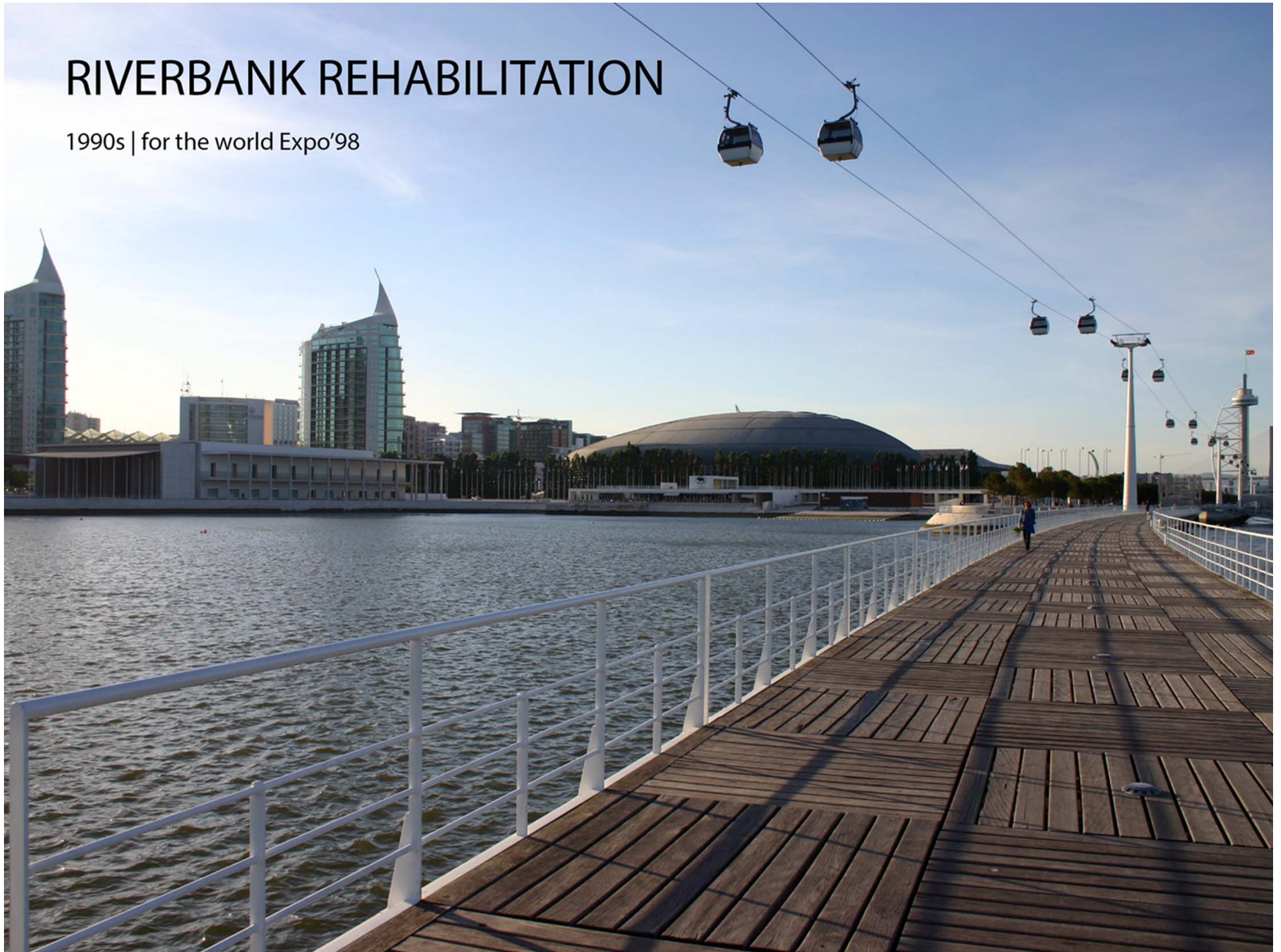
LEISURE bars, restaurants, night clubs
CULTURE monuments and museums
GREEN AREAS for walking and cycling

+ great weather conditions during
most of the year



RIVERBANK REHABILITATION

1990s | for the world Expo'98



RIVERBANK REHABILITATION

2010 | areas of "Praça do Comércio" and "Belém"



RIVERBANK REHABILITATION VS. ABANDONED AREAS



Cais da Matinha



Museu da Electricidade, Belém



SITE LOCATION

SITE INFORMATION

Former Gasification Plant
Constructed in 1947

Demolition of Mathinha Gas Plant and Warehouses in 2007

GOAL:

Mixed Use Development

Target No. of Occupants: 15,000

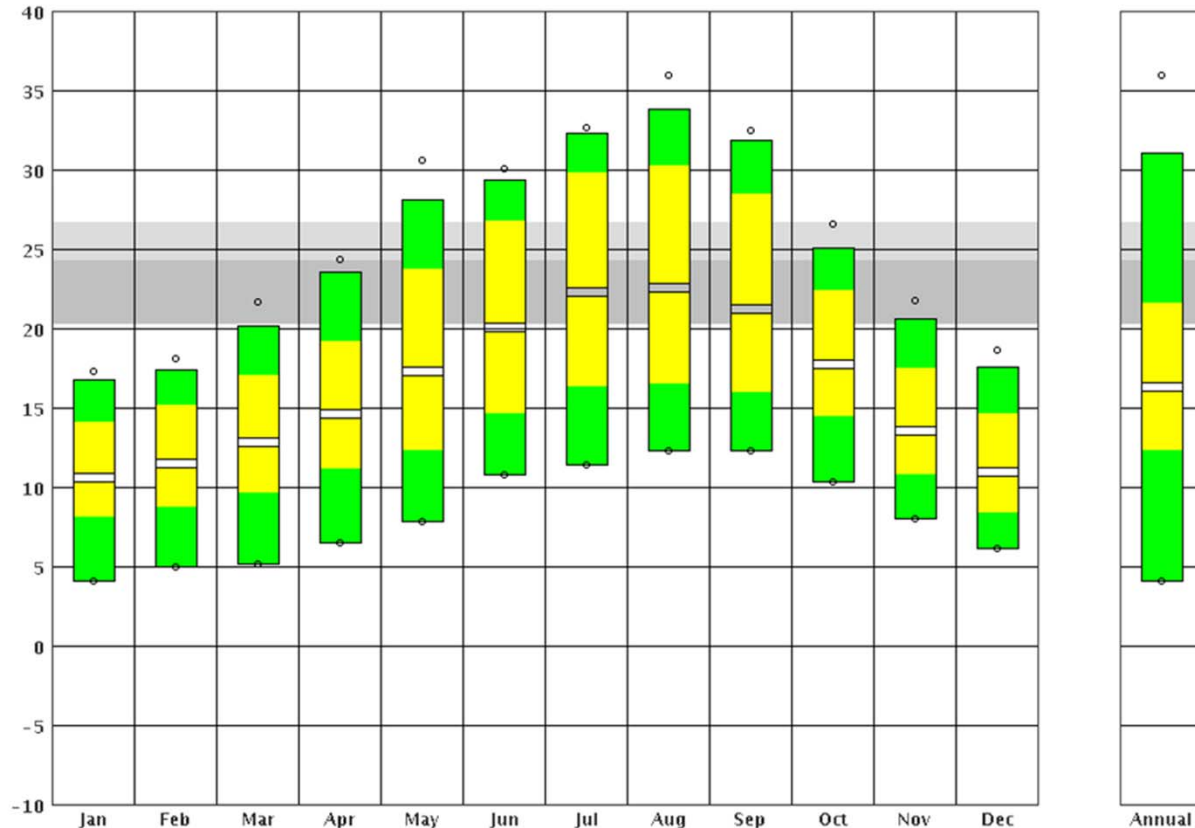
Total Site Area: 220,737 m²



SITE CONTEXT



LISBON'S CLIMATE



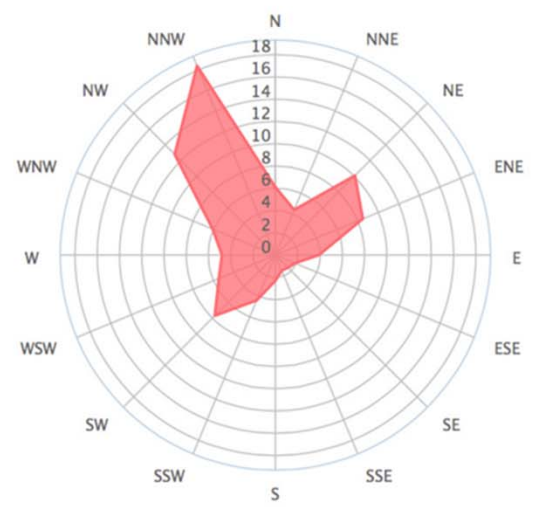
- RECORDED HIGH - ○
- DESIGN HIGH - ■ (Green)
- AVERAGE HIGH - ■ (Yellow)
- MEAN - ▬ (White)
- AVERAGE LOW - ■ (Yellow)
- DESIGN LOW - ■ (Green)
- RECORDED LOW - ○

Temperature Range

Sunshine hours

City	Year
Kuwait ¹	3000.5
Lisbon ²	2806.3
Boston ³	2,633.6

1) & 3) NOAA 2) Hong Kong Observatory



Annual Wind Direction Distribution (%)

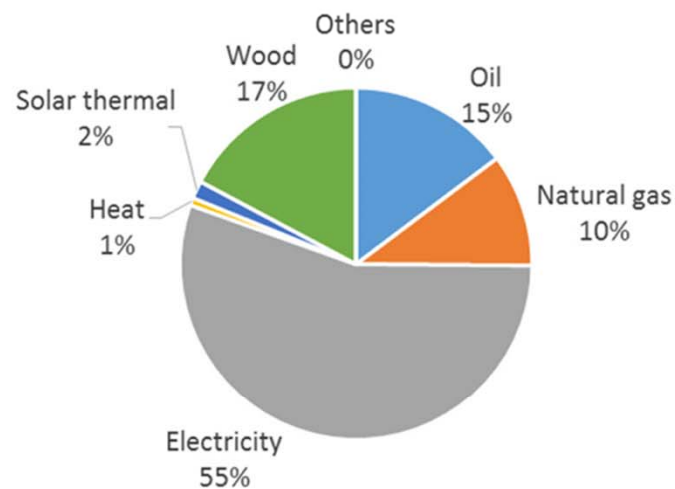
CONTEXT

PORTUGAL

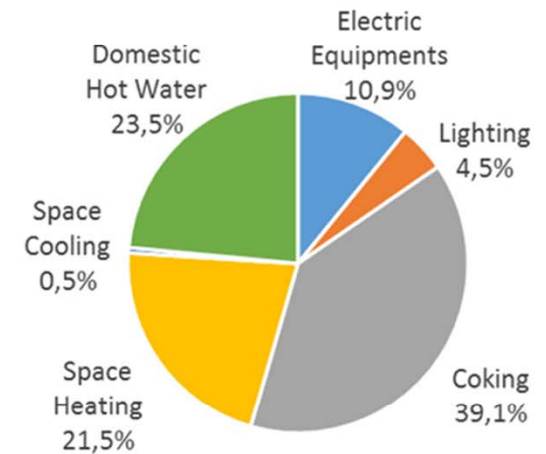
2nd LEAST ENERGY CONSUMER IN EU (Residential sector)

AVERAGE ELECTRICITY CONSUMPTION | kWh/m²/yr

Residential	35-40
Retail	81
Office	156



ENERGY CONSUMPTION IN BUILDINGS



DISTRIBUTION OF ENERGY CONSUMPTION (RESIDENTIAL)

Source: ADENE, Agencia para a energia



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