WHO IS IDEOL?

1 specialty:

DESIGN & ENGINEERING OF FLOATING FOUNDATIONS for the offshore wind industry

2010

Ideol’s year of creation
Location: La Ciotat / Marseille (France)

60

People
90% engineers
(up from 26 in Jan 2015)

3

patents of which « Damping Pool »
WHO IS IDEOL?

THE floating technology behind FRANCE’S FIRST OFFSHORE WIND TURBINE (commissioning summer 2016)

THE floating technology:

► identified by a leading Japanese consortium as the solution most likely to dramatically impact the LCOE of floating offshore wind

► selected for 2 full-scale demonstrators off the coast of Japan in partnership with Hitachi Zosen (commissioning summer 2016)
THE floating technology:
► selected for a demonstrator as part of a bottom-fixed pilot farm developed by

(planned for 2019)
IDEOL’S APPROACH

**NOT** a « product – driven » approach

**NOT** an « industrial-heritage » - driven approach

**NOT** an « innovation for the sake of innovation » - driven approach

**BUT**

A MARKET-DRIVEN APPROACH

- Offshore wind projects are being developed further from the shore and in deeper waters
- Wind turbines and wind farms are increasing in size
- Market requires a dramatic drop in the LCOE
DESIGN and ENGINEERING of the floating structure have to be FAST, the ARCHITECTURE has to be SIMPLIFIED and COMPACT.

Principal MATERIAL has to be ADAPTABLE (concrete in the EU and the US, steel in some other countries).

CONSTRUCTION has to rely on proven, cost-efficient and universal methods and know-how.

MAINTENANCE and OFFSHORE OPERATIONS have to be MINIMIZED.

MOORING SYSTEMS have to be INNOVATIVE in order TO REDUCE COSTS.

COLLABORATION WITH KEY STAKEHOLDERS (wind turbine manufacturers, marine contractors, etc.) has to be SYSTEM-ORIENTED AND PRO-ACTIVE from day 1.

THE HIGHEST POSSIBLE LEVEL OF LOCAL CONTENT.
IDEOL’S « DAMPING POOL »
WHERE IS THE MARKET GOING?

• **Definite increase in the size of offshore wind turbines**
  - increase in the size of (nearly all types of) sub-structures ... leading to logistics issues, cost issues, etc.
  - limits of offshore installation vessels

• **Highest local content expectations**

• **Increase in site with challenging seabed conditions in « low-hanging fruit » areas**

• **General consensus that floating wind will offer a better LCOE by 2025**
WHICH SOLUTIONS TO CONSIDER?

• **Compact and simple architecture**
  = limited portuary infrastructure / yard constraints
  = limited quantity of material
  = ease of industrialization

• **High local content**

• **Flexible choice of material**

• **Time-tested, simple mooring solutions**

• **Shallow draught**

• **Wind turbine « agnostic »**
Thank You