



**The referent player
with a ruggedized tidal energy solution**



1) Tidal in-stream energy: state of the art

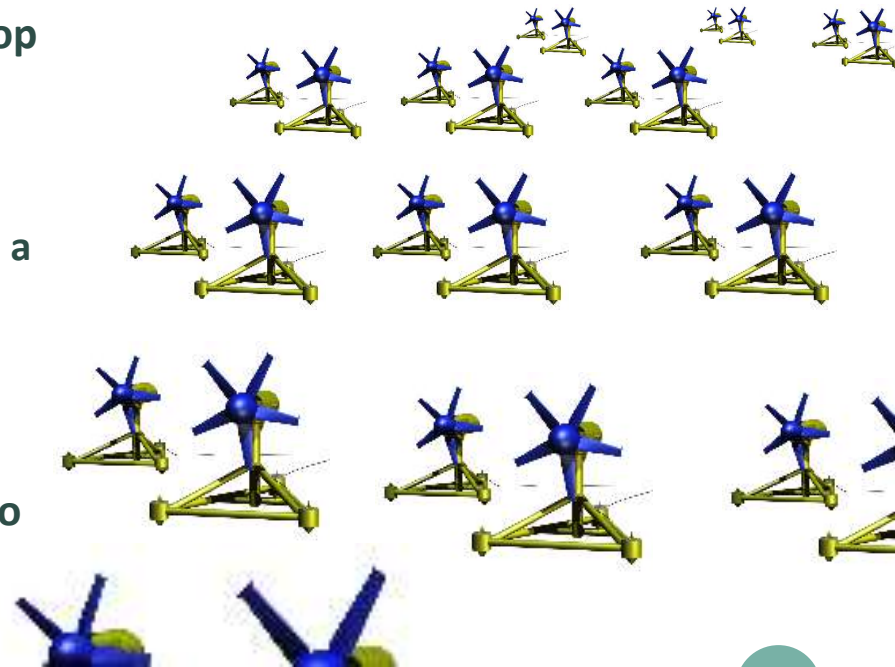
- Very few proven technologies and credible actors
- All the players are still in the learning phase as far as turbine operation and control are concerned
- Still a poor assessment of environmental footprint and social acceptance
- Installation methods and means to consolidate
- Maintenance model to set up
- General lack of return of experience



D10 turbine immersion in June 2015

2) A common challenge for all the players:

- Dire need to cut the costs quickly so as to develop large commercial parks
- Double objective:
 - compete with mature renewable energies supplying power to interconnected grids with a high production mix;
 - propose acceptable IRR to power operators / investors.
- CAPEX costs must be divided by 2 to 3 in order to open mass market access



3) SABELLA's market analysis

- Mass market opening not before mid 2020s, notwithstanding ministerial announcements
- As a result, abandonment or stand-by of some major players
- Current alternative with niche markets where SABELLA's solution is already competitive:
 - remote grids in islands and shore communities;
 - current energy cost from carbon model is 10 to 20 times higher than costs on interconnected grids;
 - as of now, access to small projects.



D10 turbine recovery in July 2016 at the end of site authorization

4) SABELLA international targets

- ASEAN area counting more than 25.000 islands between the Philippines and Indonesia.
- Exclusive agreement with H&WB and PNOC-RC in the Philippines.
- Industrial partnership in Indonesia in order to explore several prospects. An up-coming joint technical agreement with EBTKE.
- Prospection in subarctic areas, with a political support in Canada.



5) A required domestic market

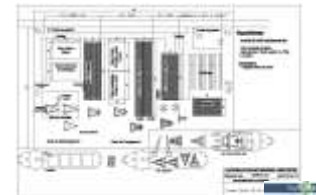
- ❑ EUSSABELLA, a French pilot farm project to serve as a insular energetic model reference for worldwide duplication (part of the PHARES project in Ushant – including storage and additional RE)



D10 turbine re installation on its gravity-based foundation

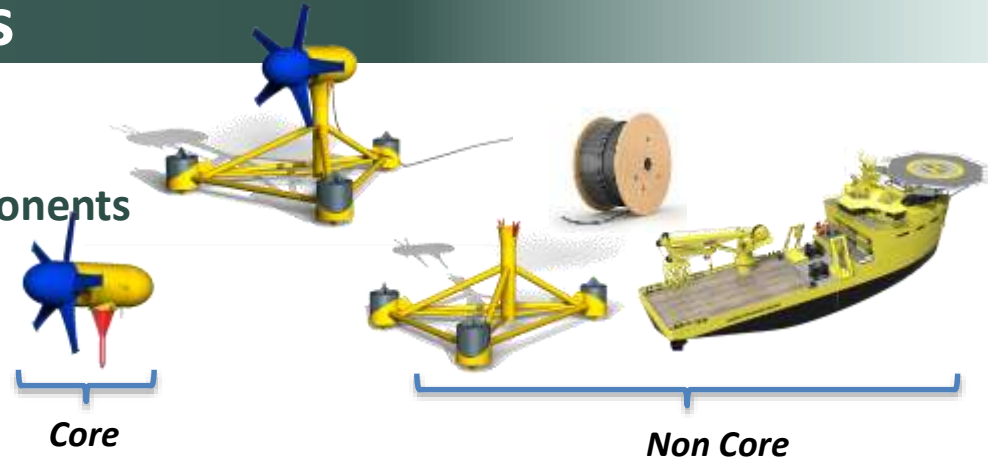
- ❑ For long operation periods with continuous harnessing (2-year extension for D10)

- ❑ Prospective study in progress to prepare an industrial deployment in Brest in order to face next bidding processes



6) Export market issues

- Important local content obligations
- Identification of “Core vs Non Core” components
- Ability to defend its IP rights
- Appropriate IP policy
- Export financing leverage
- Export credit insurance / exchange guarantee



7) Export: « hunt in pack » strategy

- SABELLA was originally founded from a SME consortium



- Work with SME is in our DNA...



- ... and so is taking SMEs with us on the export market.



8) SME collaborative attitude

- Willingness to listen and share our knowledge vs. arrogance of “one-size-fits-all” solutions
- Strong cultural interest, effort for local languages
- Local nationality recruitments



On the way to islands...





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Thank you for your attention



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