

5. İzmir Wind Symposium

The Differences in Onshore and Offshore Wind Project Development Processes

Güray EROL RES Anatolia Holding A.Ş. - General Manager TÜREB - Secretary General







3 October 2019

RES Overview



EIA, Permitting, Surveys in Onshore and Offshore Development



Туре	EIA&Permitting	Surveys
<section-header></section-header>	 Securing land agreements and grid connection Full suit of physical, biological and human receptors 	 Wind measurements (Lidar/met-mast or hybrid) Radar Survey - TIA (Technical Interference Analysis) Topography survey Soil investigation Protected species and habitat surveys
<section-header></section-header>	 Physical Environment: Coastal processes & years of the processes & years of the processes of the proceses of the processes of the processes of the pro	 Wind measurements (Floating Histor protomast or hybrid) Geophysical (bathymetry + metocean) Characterising geotechnical Marine biology (marine & intertidal) Aerin (Birch & marine hammals) Ration surrest of shitping traffic

Timeline and Cost Comparaison in Onshore and Offshore Development



Туре	Timeline (Up to)	Cost (Up to)
<section-header></section-header>	 Measurements: 1-2 years Radar Analysis: 1 years Mining Clearance: 1 years Topo Survey: 0.5 - 1 year EIA: 2 years Zoning: 1.5 years Land Acquisition: 1.5 years OHL Permits: 3 years 	
<section-header></section-header>	 Site Measurements: 2 years Radar Analysis: 2 years Topo Survey: 0.5 - 1 year EIA: 3 years 	 Site Measurements: x25 of Onshore Soil Investigation: x20 of Onshore EIA: x6 of Onshore Geotechnical, Aerial and Geophysical Surveys: x 10 of Ofshore Other Marine Surveys: 250k€ to 500k€ *Assumptions considered: 400 MW project, geotechnical studies onshore, onshore sub-station, <5 km offshore cable route

Lessons learned

Identification of geographic areas

likely to be of little/no concern to

Reduces consultation timeframes

and costs going forward and

maintains/increase project

Site Selection

stakeholders

flexibility

- Strategic Environmental Assessment
- Clear National Policy support
- Clear guidance (EIA and permitting build on European experience)

Opportunities for Positive Engagement with Stakeholders:

Seek general views on proposal and relevant data/information Reduce views that might affect direction at a later date or data/information not considered in assessment

Agree "scope" and methodology for environmental surveys and data collection with key stakeholders

Reduces risk of concerns raised at the application stage over methodology/scope of surveys requiring re-collection of data Agree "approach" to EIA with key stakeholders

Reduces risks of EIA findings not being accepted due to concerns over the methodology used to predict significance of potential impacts

Agree (in principle) scope of mitigation and monitoring (subject to findings of EIA) Reduce potential for programme delays negotiating mitigation/monitoring requirements pre-construction Consult early on findings of EIA with key stakeholders Allows the developer to amend application prior to application and reduces determination period

Seek to agree areas of remaining disagreement with stakeholders

Reduces determination period by providing regulator with a focus of remaining disagreement

Application Submission & Determination

EIA Scoping

Environmental Surveys & Data Collection

Periodic presentation of data

A number of benefits including

development of relationship with

stakeholders: re-prioritization of

indication of concerns increasing

effort based on findings; early

time to implement mitigations

to key stakeholders

during the data collection period

Compile EIA



THANK YOU Any Questions?



@RES_Americas | @RESenFrance | @RESGroup