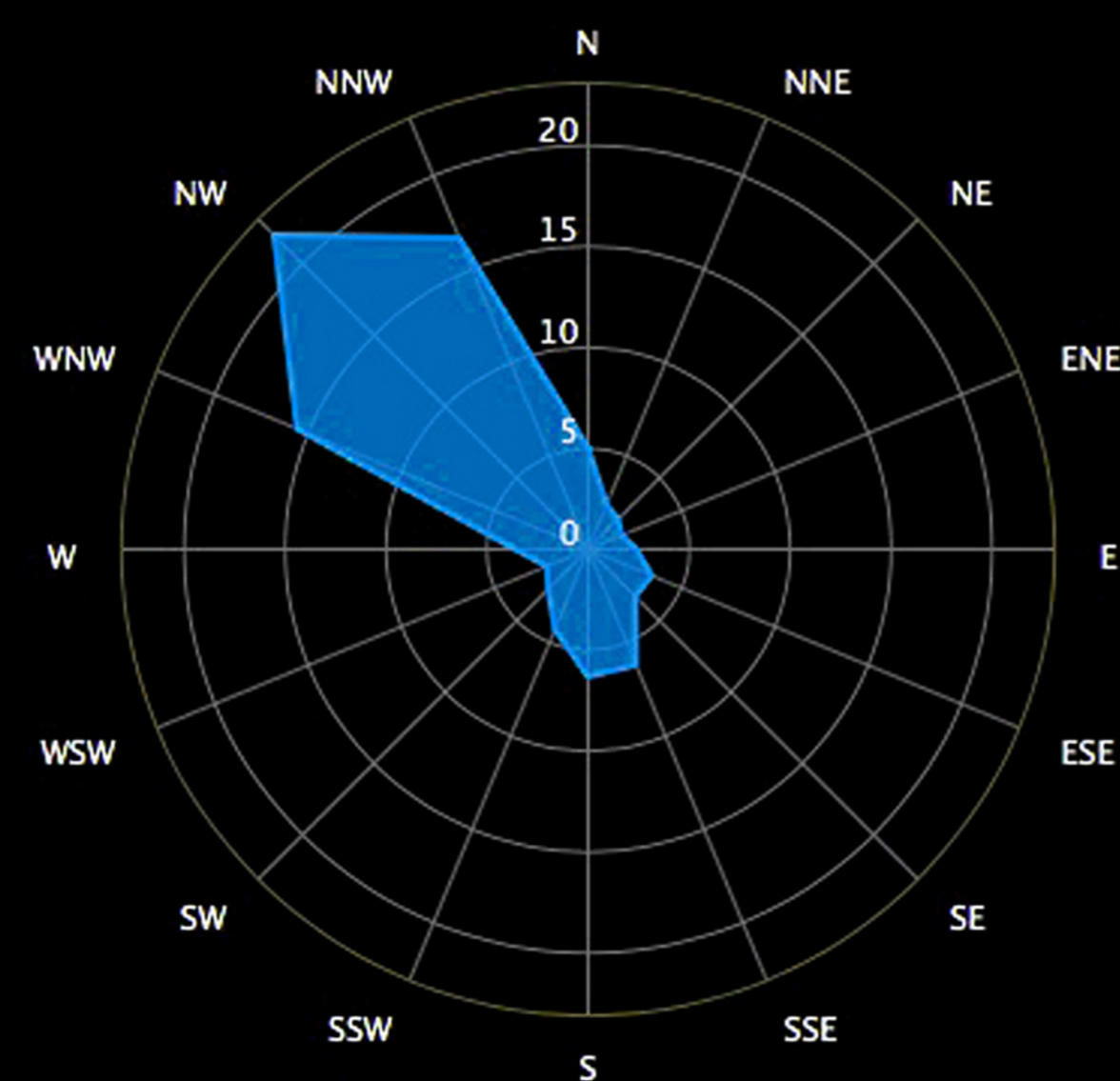


Aerial View **WINDunes**



Site Plan



Located between two green areas, the site serves as a dominant wind corridor to harness the predominant NW wind from the sea. Built of 28 wind turbines connected with tensile PV membranes, 'WINDunes' is not only an integrated energy converter but provides a covered public space for local activities.

Each turbine, 15m in diameter and 30m above ground level, can generate approximately 33000 kWh from an average wind speed of 14km/h. 28 turbines combined can generate approximately 924MWh. The tensile PV membranes are spanning across turbines masts, approximately 3600m² (1/3 of the SE facing surface) is available for photovoltaic installation, generating up to 7200MWh (2000kWh/m².)

Rainwater is collected on the parabolic membrane surface and funneled down through concealed pipes to underground water tank for reuse. The 'funnel-shaped' structure minimizes construction footprint and surface runoff.

Abu Dhabi
Annual Wind Direction %

