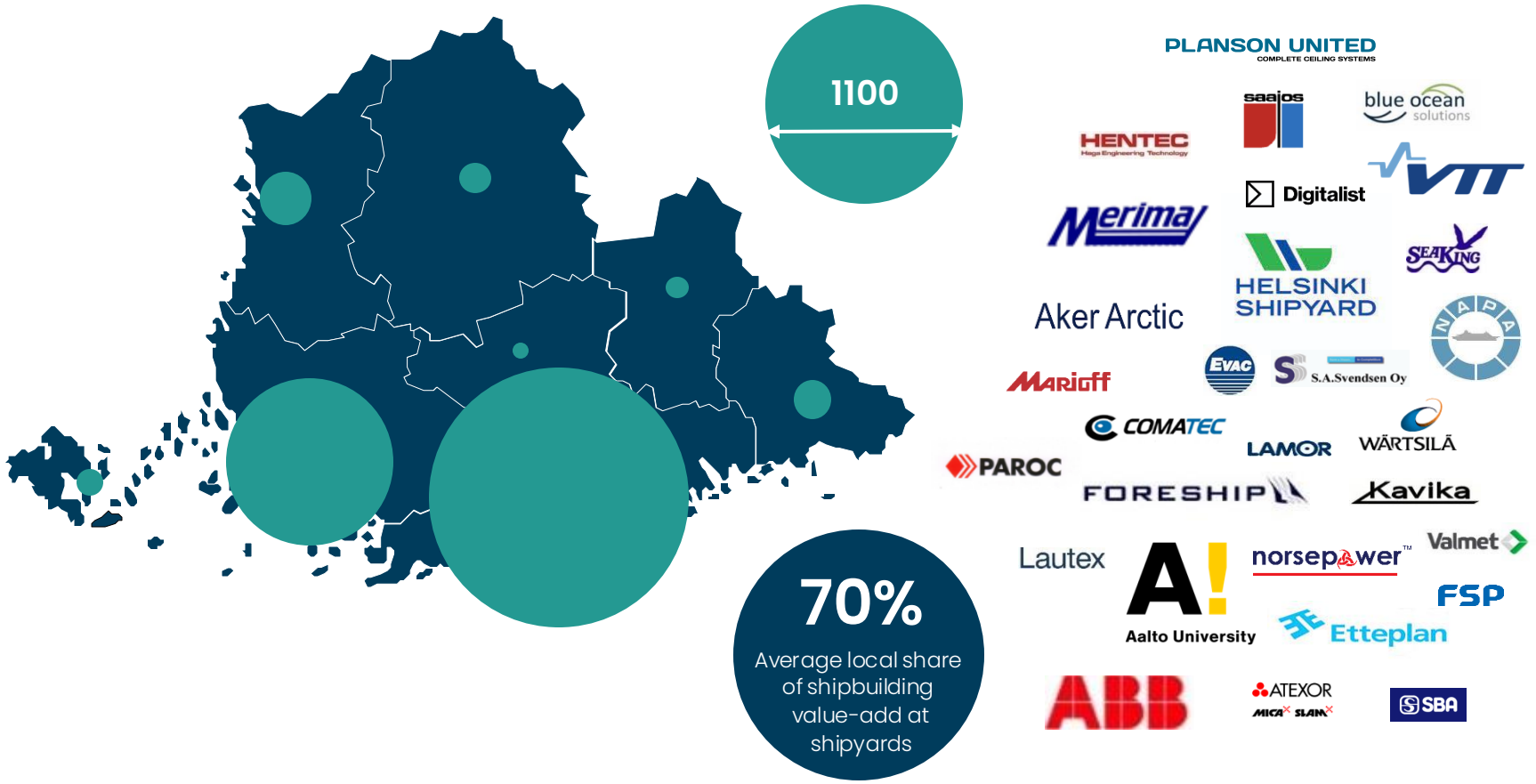
DAVIE 200
1825-2025

HELSINKI
SHIPYARD

Concentration of maritime cluster by region, # of companies



Part of the World's #1 maritime supply chain

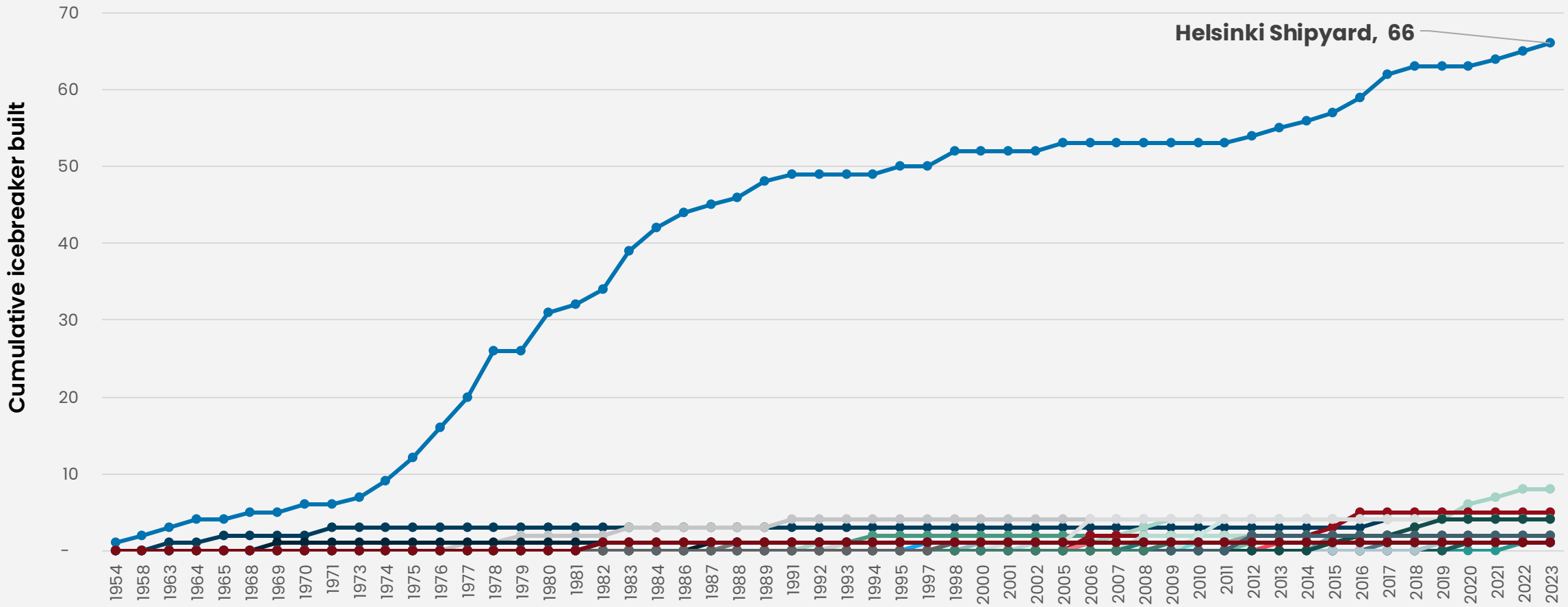
- Helsinki region has a world-class marine cluster, including university education and R&D facilities
- A high number of maritime companies are headquartered in Helsinki with operations closer to construction sites as well
- World-leading specialization in harsh environment shipbuilding

Source: Reddal analysis, interviews with stakeholders, Finnish Marine Industries analysis 2018, Helsingin Sanomat

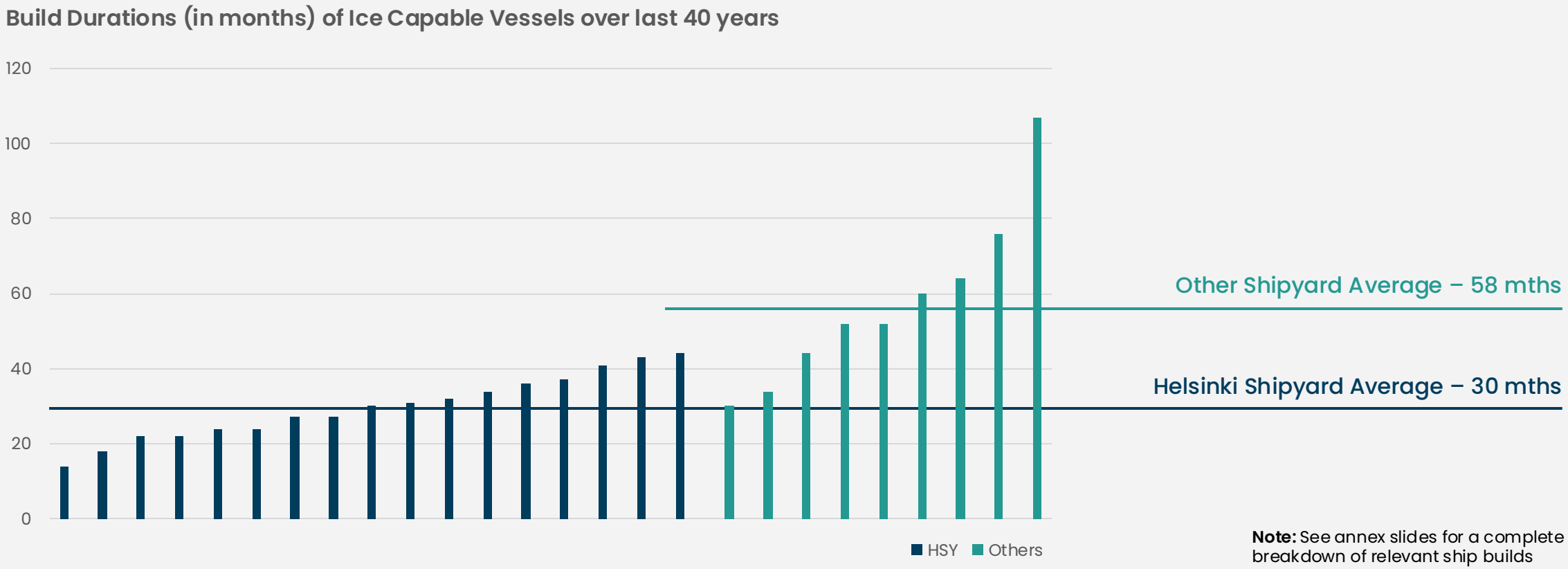
Helsinki Shipyard: a history of world firsts in icebreaker innovation

2020	World's most powerful diesel-electric icebreaker (export license cancelled)
2016	World's first dual-fuel LNG/diesel Icebreaker
2014	World's first oblique icebreaker
1994	World's first icebreaker with Azipod propulsion units
1988	World's first nuclear icebreaker built outside Russia Welding procedures for extra high tensile steel materials
1986	World's first icebreaker with diesel-electric power plant AC-DC with cycloconverters
1975	World's first icebreaker design by ice model tests Developed new high tensile steel for low temperature use
1974	World's most powerful diesel electric Icebreaker
1969	World's first icebreaker with air bubbling system World's first Ice Model Test Laboratory
1960	World's largest and most powerful non-nuclear icebreaker
1954	First four screw diesel-electric Icebreaker

Helsinki Shipyard has built 50% of the icebreaker fleet



Build time is two years faster than rest of world



Note: See annex slides for a complete breakdown of relevant ship builds

Average build duration for an ice capable vessel at Helsinki Shipyard is **>2 years faster** than the rest of the world