

ROGER REVELLE Midlife Refit

Big Thank You to Federal Funding Agencies*

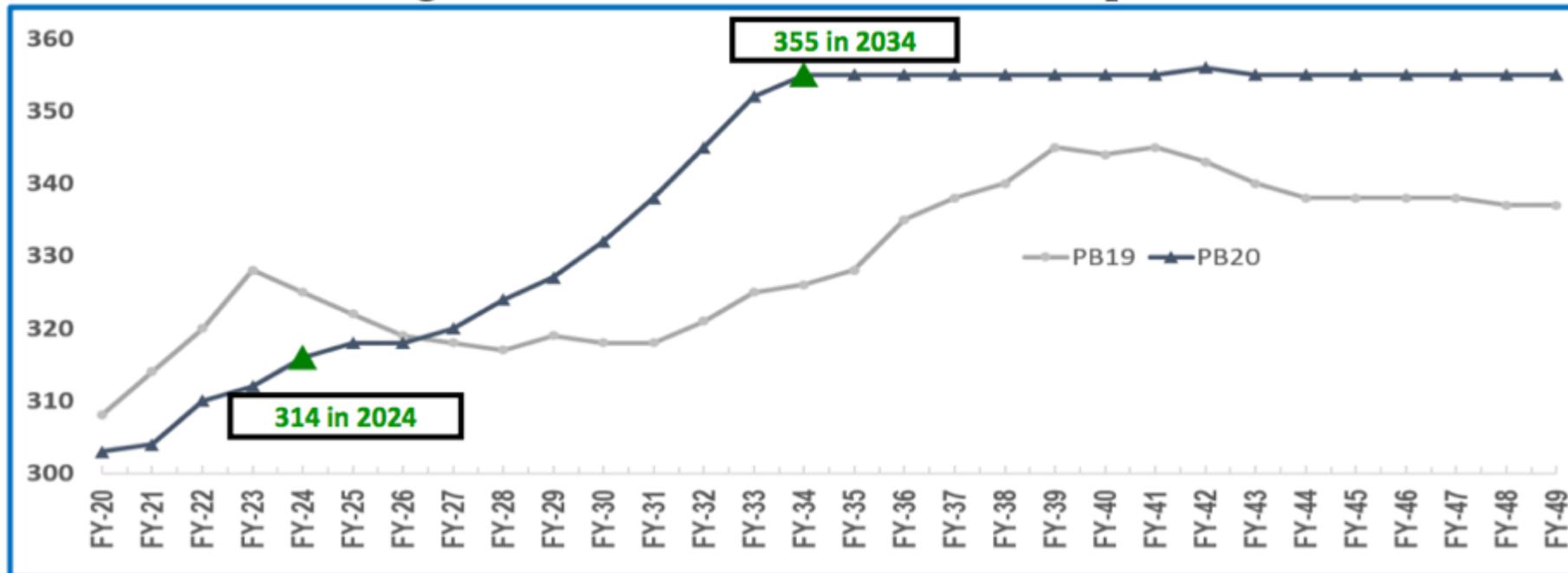
- Office of Naval Research
- National Science Foundation

- We truly could not do this without you.

- (i.e. * Partners, Advisors, Confidants, Friends)

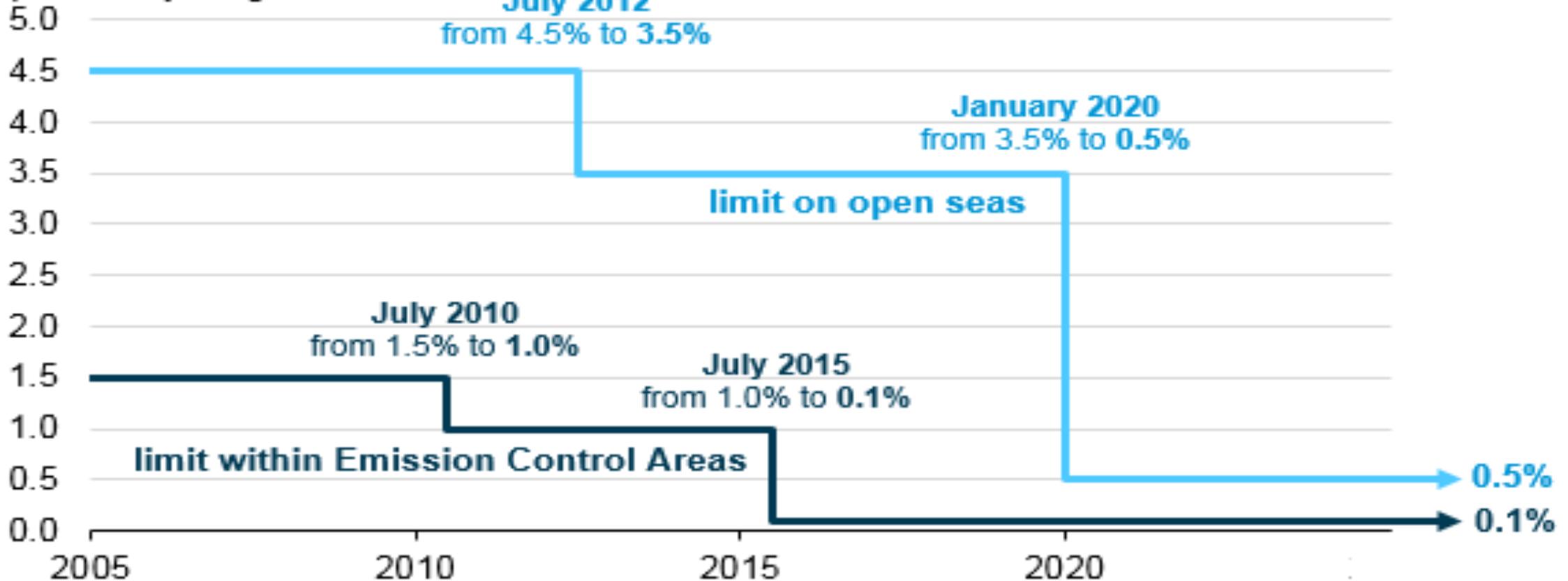
Competition for Resources

Figure A2-1. PB2020 vs. PB2019 Comparison



Changes in marine fuel sulfur limits will effect global oil markets

Global marine fuel sulfur limits
percent by weight



Competition for Talent

- NASSCO San Diego ... 34 open positions
- The Navy's end strength will also increase over the next five years, adding nearly 17,000 sailors
- Nuclear engineer retention bonus = \$140,000 for 4 years.
- **25 Top Public Colleges With The Highest-Earning Graduates**
 - **No. 1: SUNY Maritime College**
 - **No. 3: United States Merchant Marine Academy**
 - **No. 10: University of California, San Diego**

Competition for Brightest and Best

- Cal Maritime 84% men, 16% women....why?
- Webb Institute 80% men, 20% women....why?
- Comparison UCSD 52% men, 48% women...
- UC San Diego's diversity champions:
 - **2018 University-wide individual recipients:**
 - Ship Operations - University-Wide Departmental/Unit Recipient - [Video](#)

Refit schedule

- One year 15 April 2019 to 14 April 2020
- Goal: all production work complete 1 January 2020

Improvements

- Integrated bus...fuel economy
- Repower...increased reliability
- Repower...EPA tier III...lower emissions
- Ballast water treatment system
- Quieter...less on deck fan noise, BT noise, exhaust noise
- Gondola...corrects bubble sweepdown
- Improved mapping and other sonars
- Added life extension, new cranes, new network

First Hull Cut



ROBERT GORDON SPROUL Replacement

- Continue to work with California Partners (CSU) and government officials to identify funding
- Marine Operation Committee: small ship replacement working group