



Ensuring Competitive Project Delivery in a Megaproject World

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President, Chevron Project Resources Co.

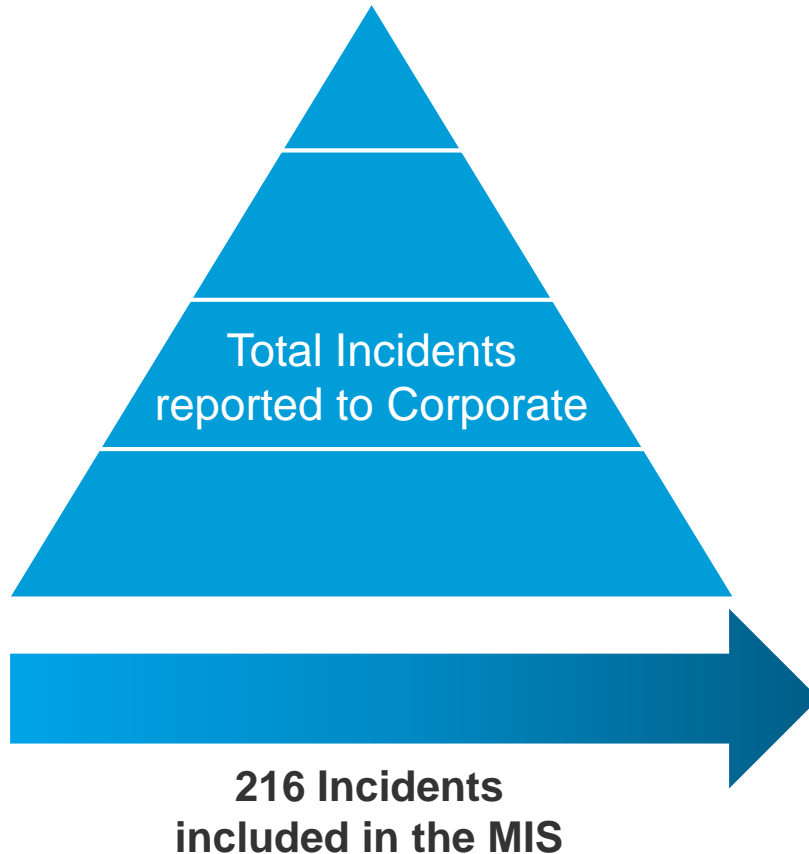
October 3, 2011

2010 Major Incident Study (MIS) Frame

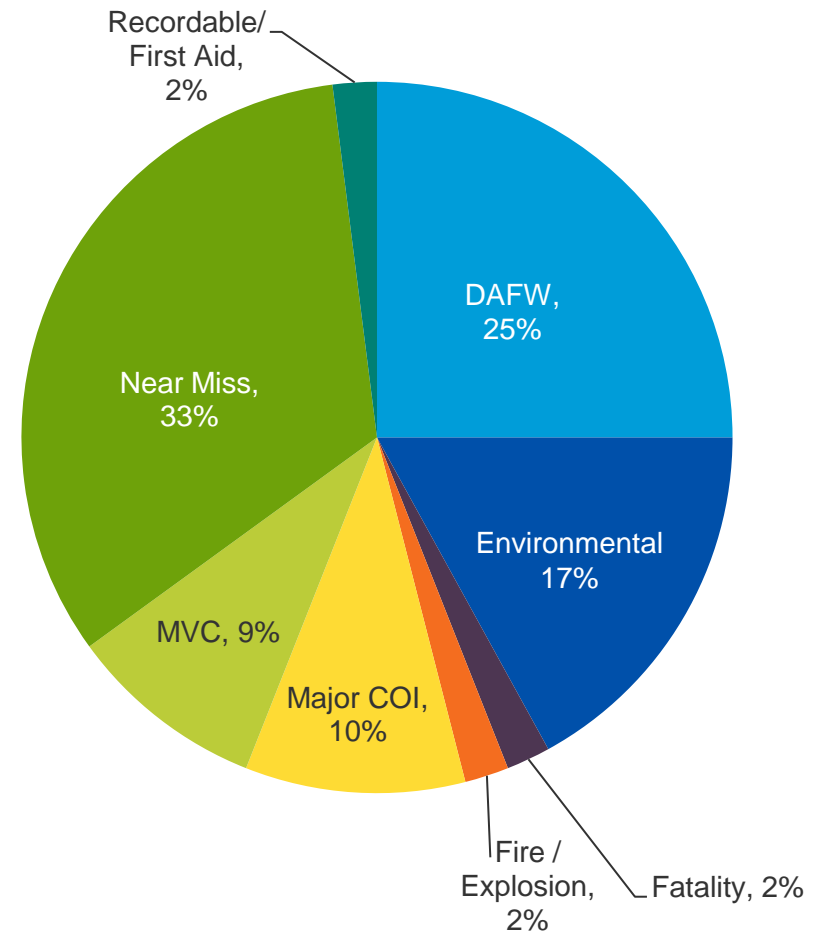
October 1, 2009 – December 31, 2010



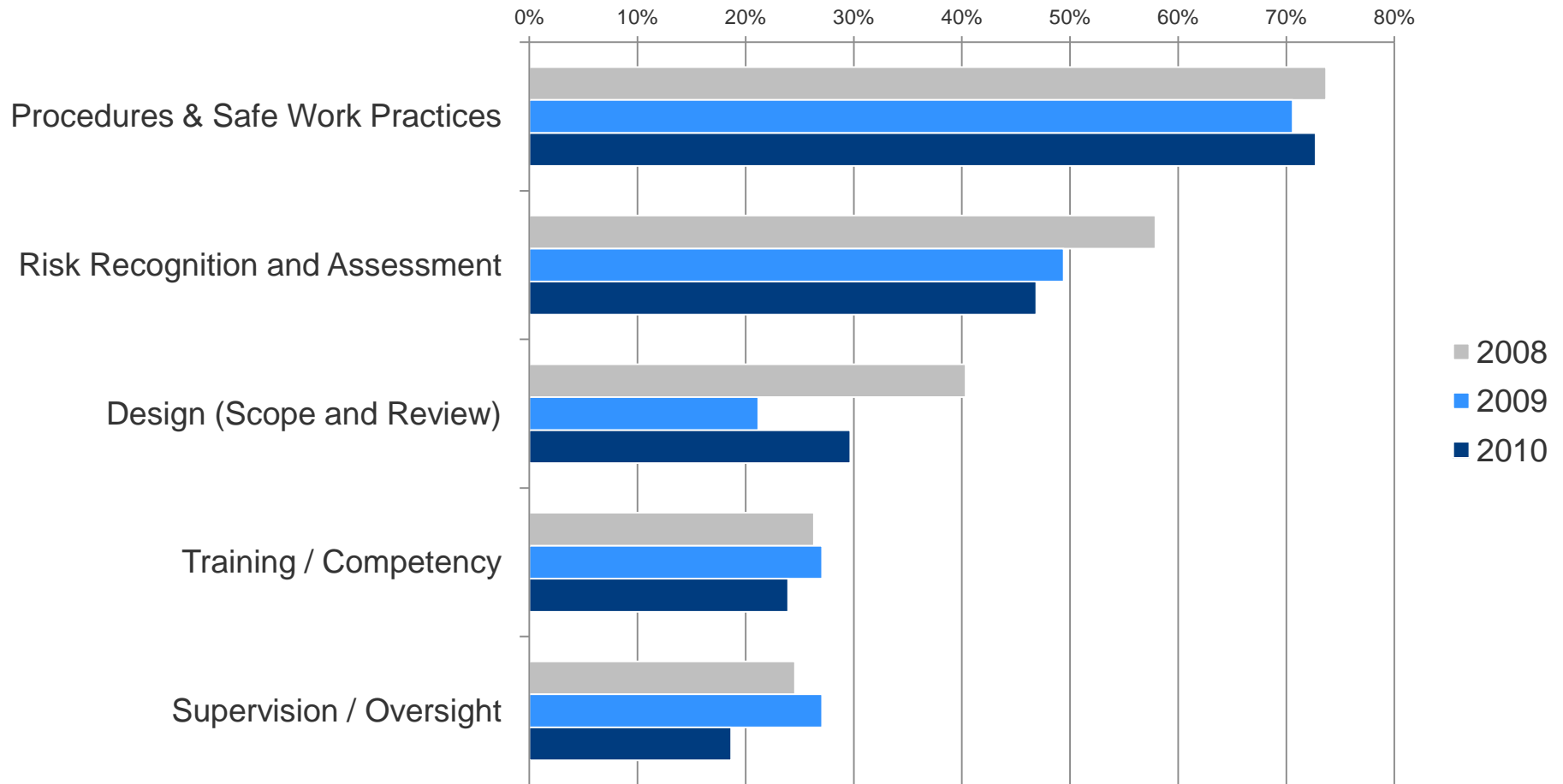
Scope



Consequences Cited in Incident and MVC Reports



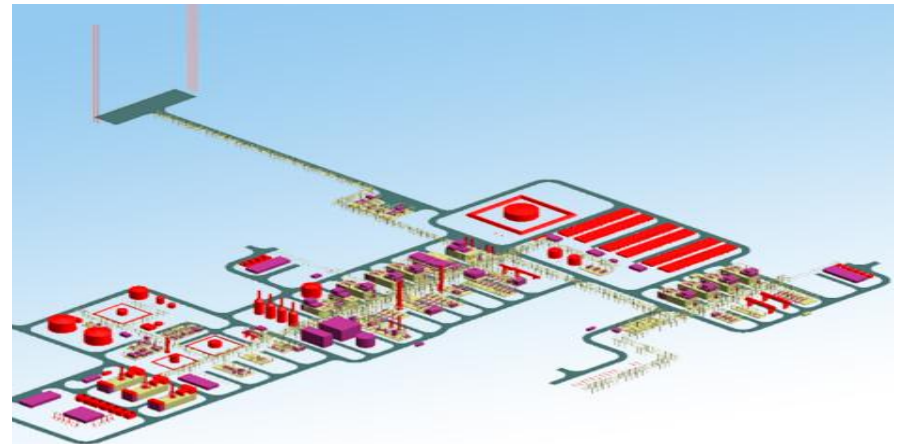
Leading Root Cause Categories



Our Megaproject World— Challenges and Solutions



- Rising energy demand and greater complexity
- Managing safety and risk
- Improved execution – maximizing value from project systems
- Investing in people
- Owner team role



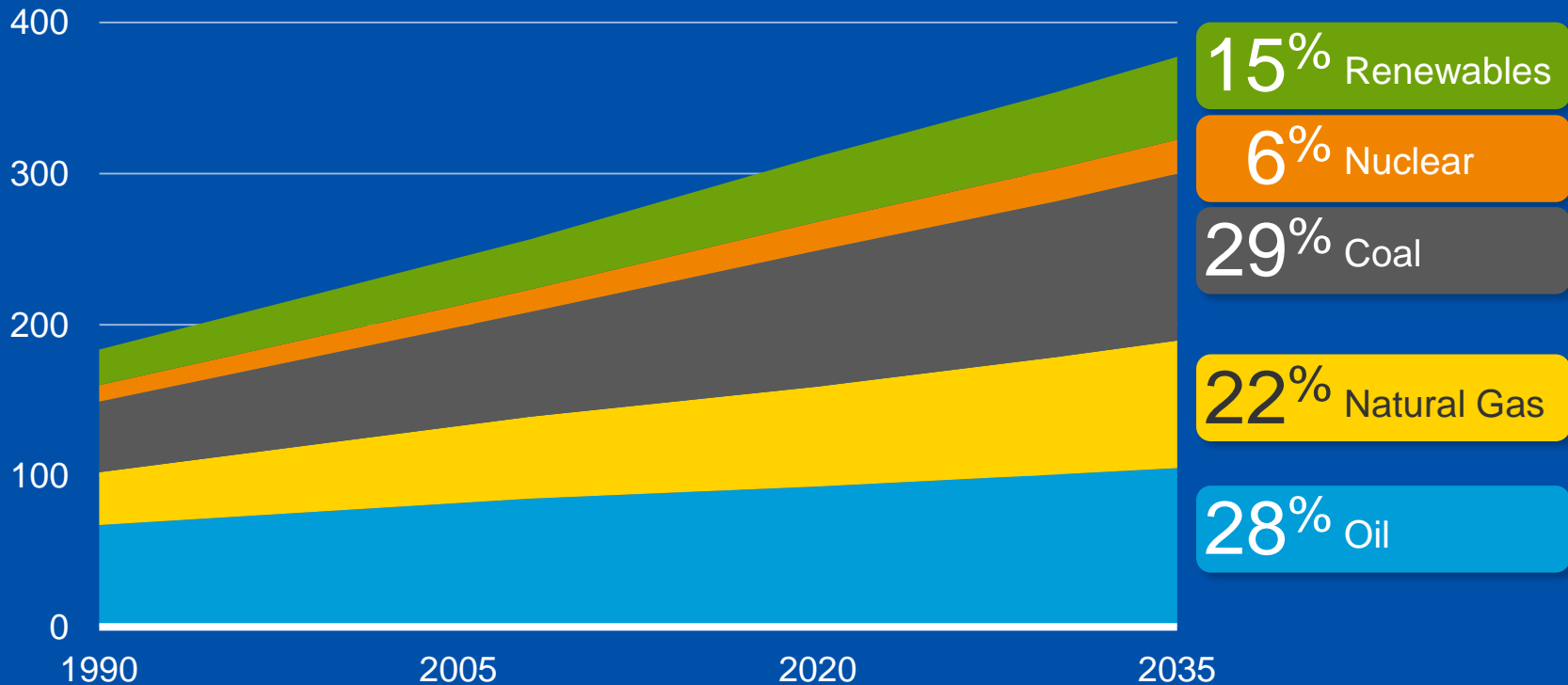
All Energy Sources Must Deliver to Meet Demand



Global Energy Demand Set to Grow ~40% by 2035

All Energy Sources Grow – But the Mix Stays Constant

Million Barrels of Oil-Equivalent per Day

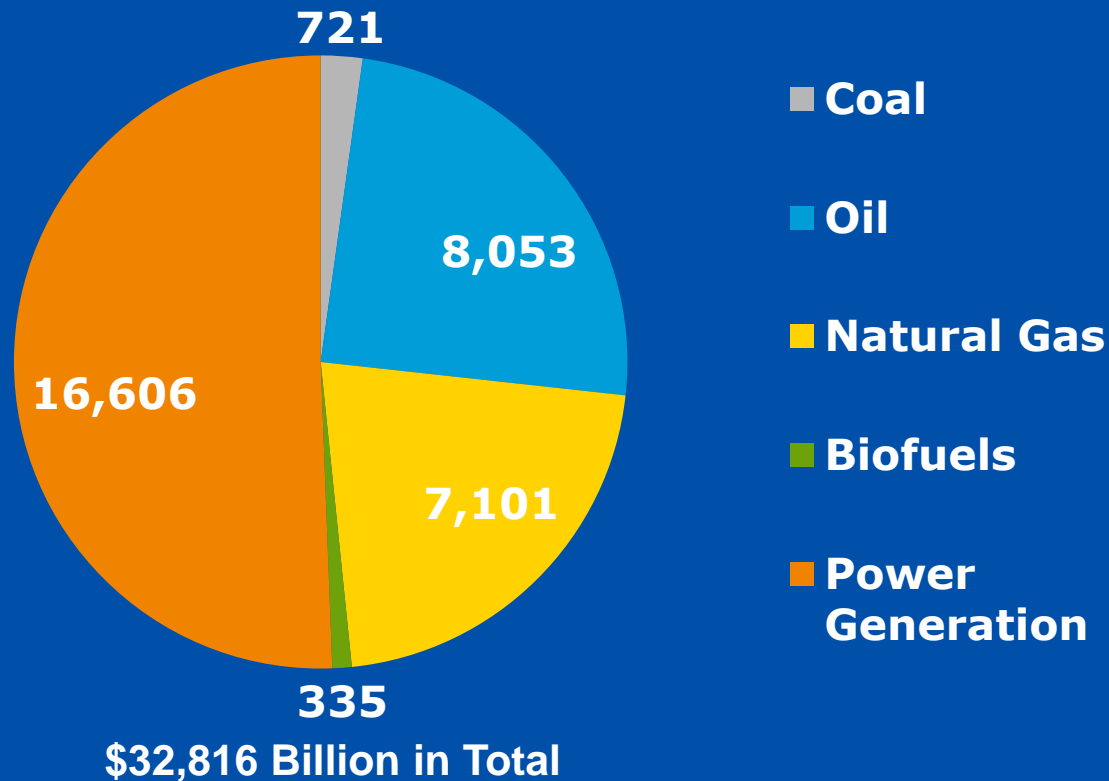


Source: IEA WEO 2010 Current Policies Scenario

Massive Investment Will Be Required To Satisfy Global Energy Demand



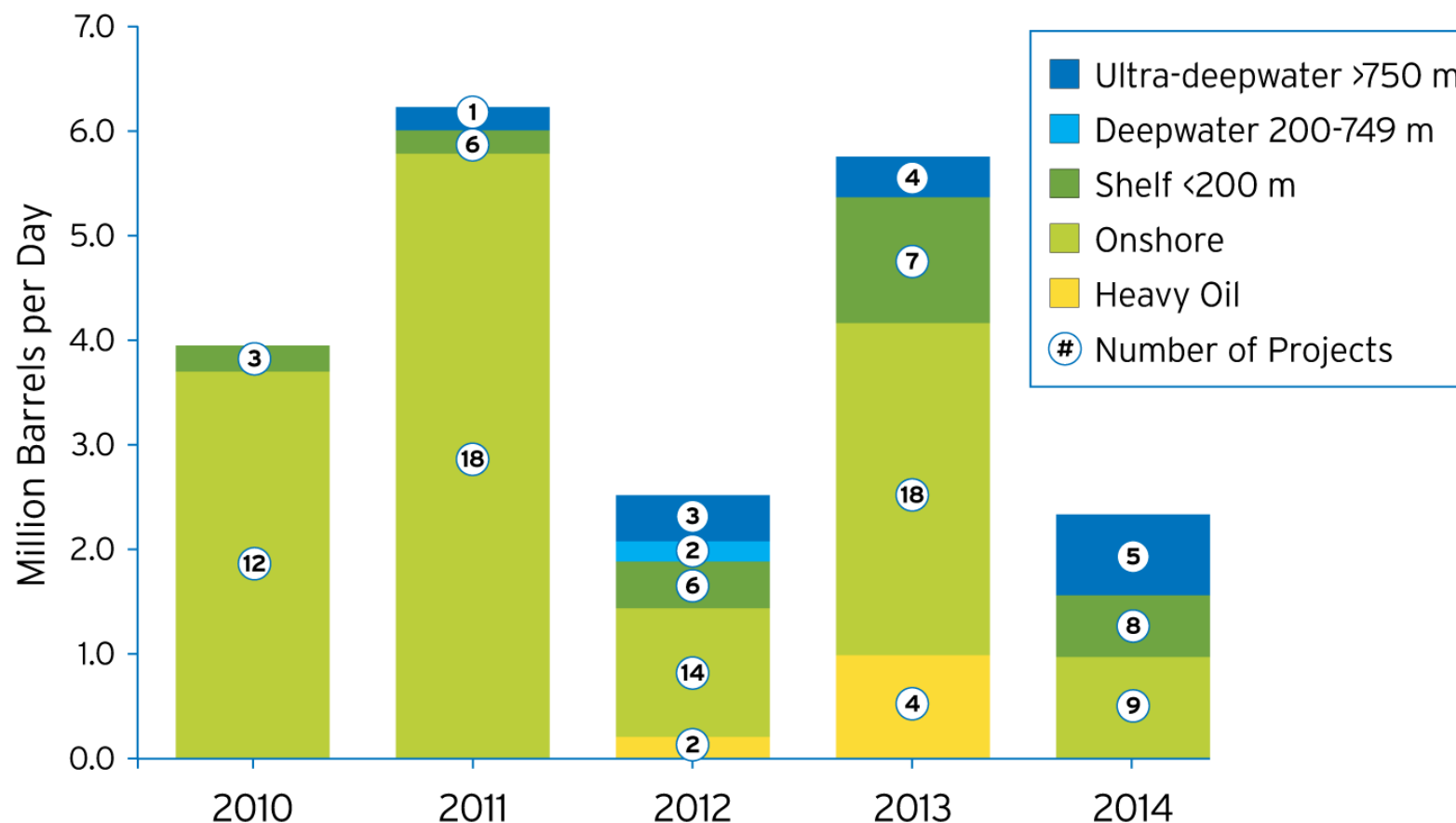
Global Cumulative Energy Investment 2010-2035 (\$ Billions – Year 2009 Dollars)



Energy Megaprojects— Deeper & More Complex



OPEC Gross Capacity Additions in 2010-2014

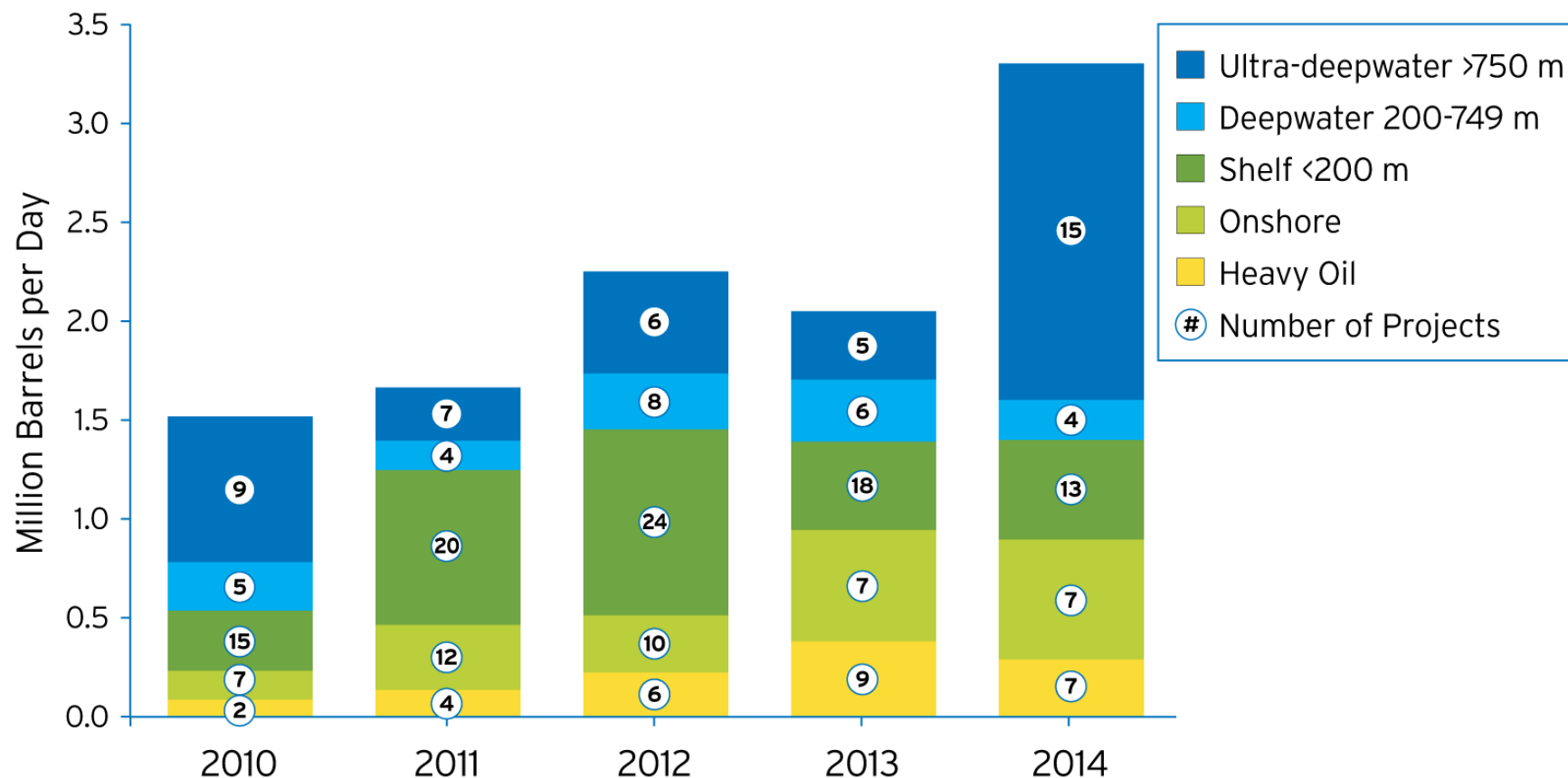


Source: IHS CERA

Energy Megaprojects— Deeper & More Complex



Non-OPEC Gross Capacity Additions in 2010-14



Source: IHS CERA

Larger Projects & MCP Portfolio— Emphasizing Standards to Improve Performance



2005

- 5 Projects >\$1B each
 - BBLT
 - SGI/SGP
 - Agbami
 - Tahiti
 - Gorgon

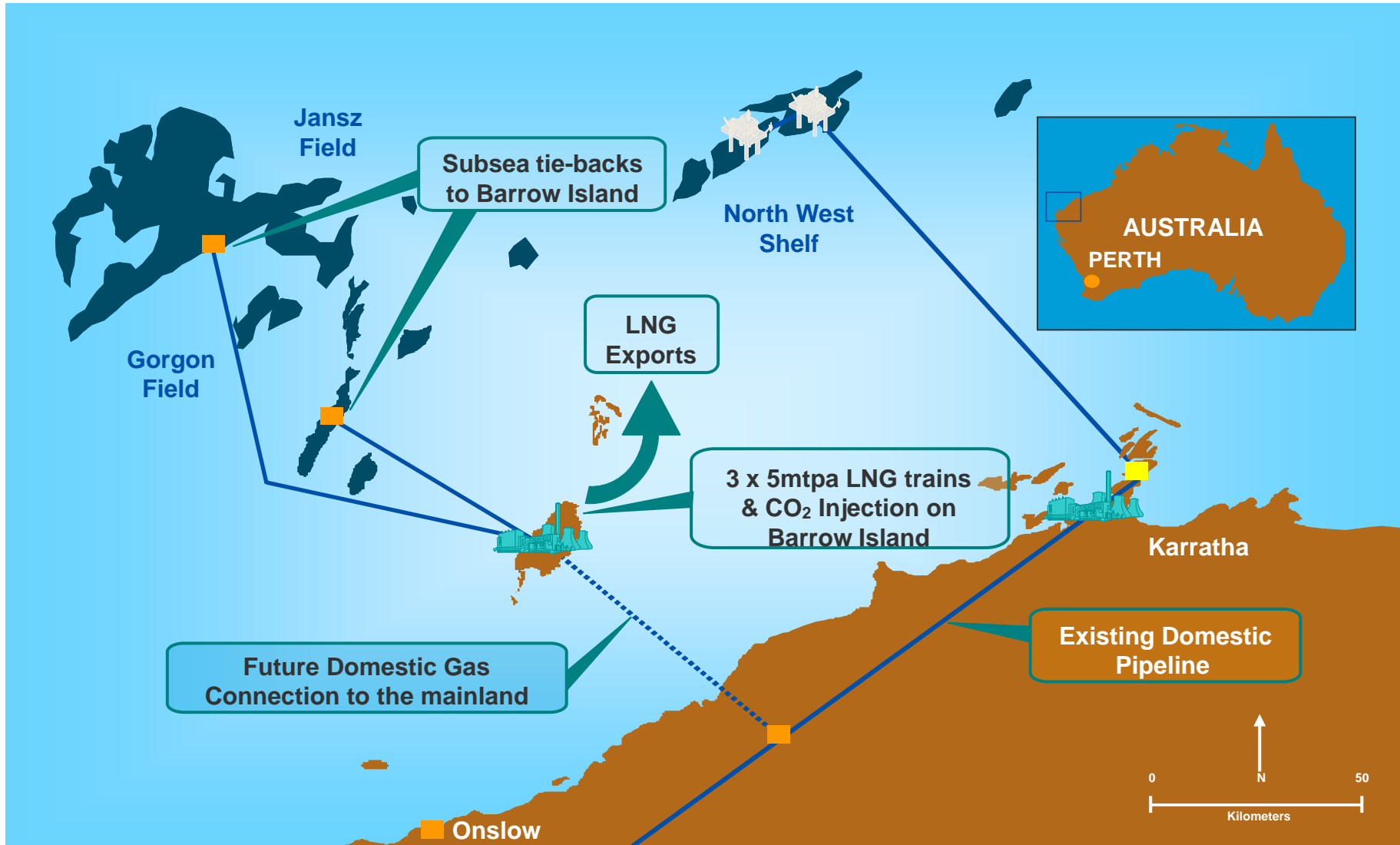


2011

- More than 30 Projects >\$1B each
 - Angola LNG
 - Big Foot
 - Chuandongbei
 - Escravos Gas To Liquids
 - CPC Expansion
 - Jack/St. Malo
 - Platong II
 - Papa Terra, Usan, Perdido
- Projects >\$10B
 - Gorgon
 - Wheatstone
 - AOSP Expansion 1

Note: Includes projects starting up or reaching final investment decision between 2011-2014

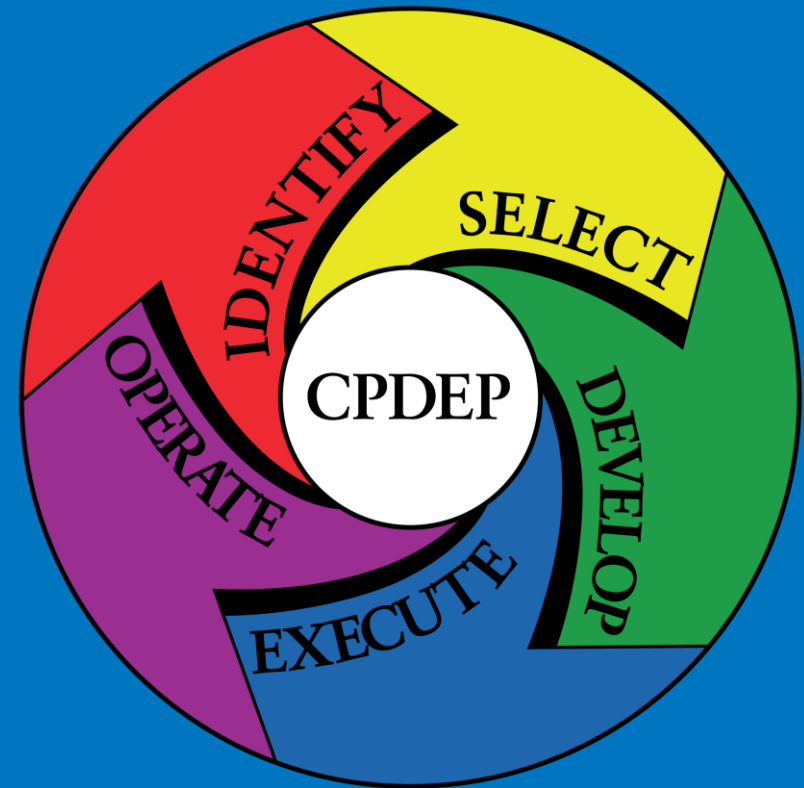
The Megaproject Complexity— Gorgon LNG



Build on Partnership to Improve Project Performance

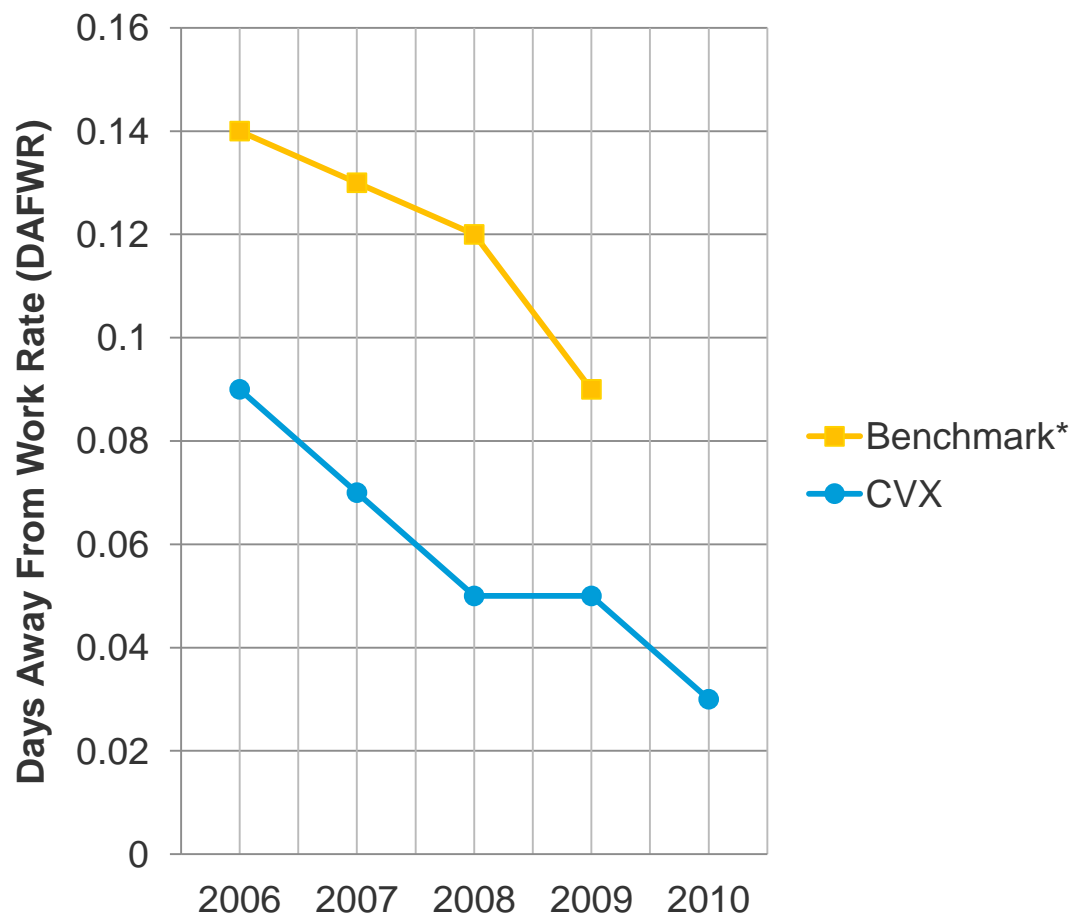
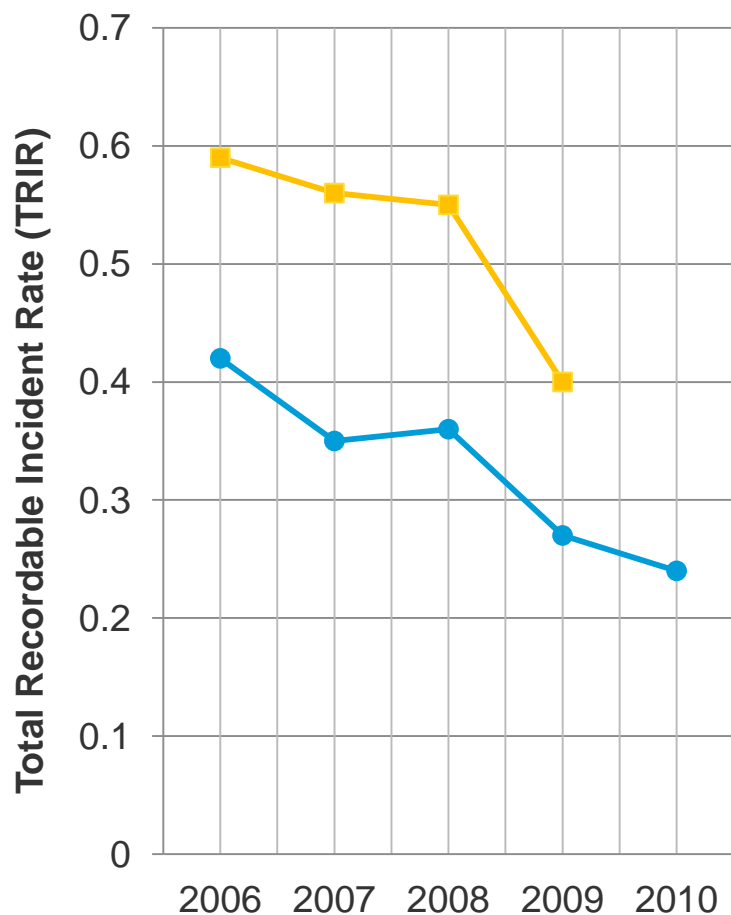


- Safety
- Risk Management
- Execution
- Investing in People
- Owner Role

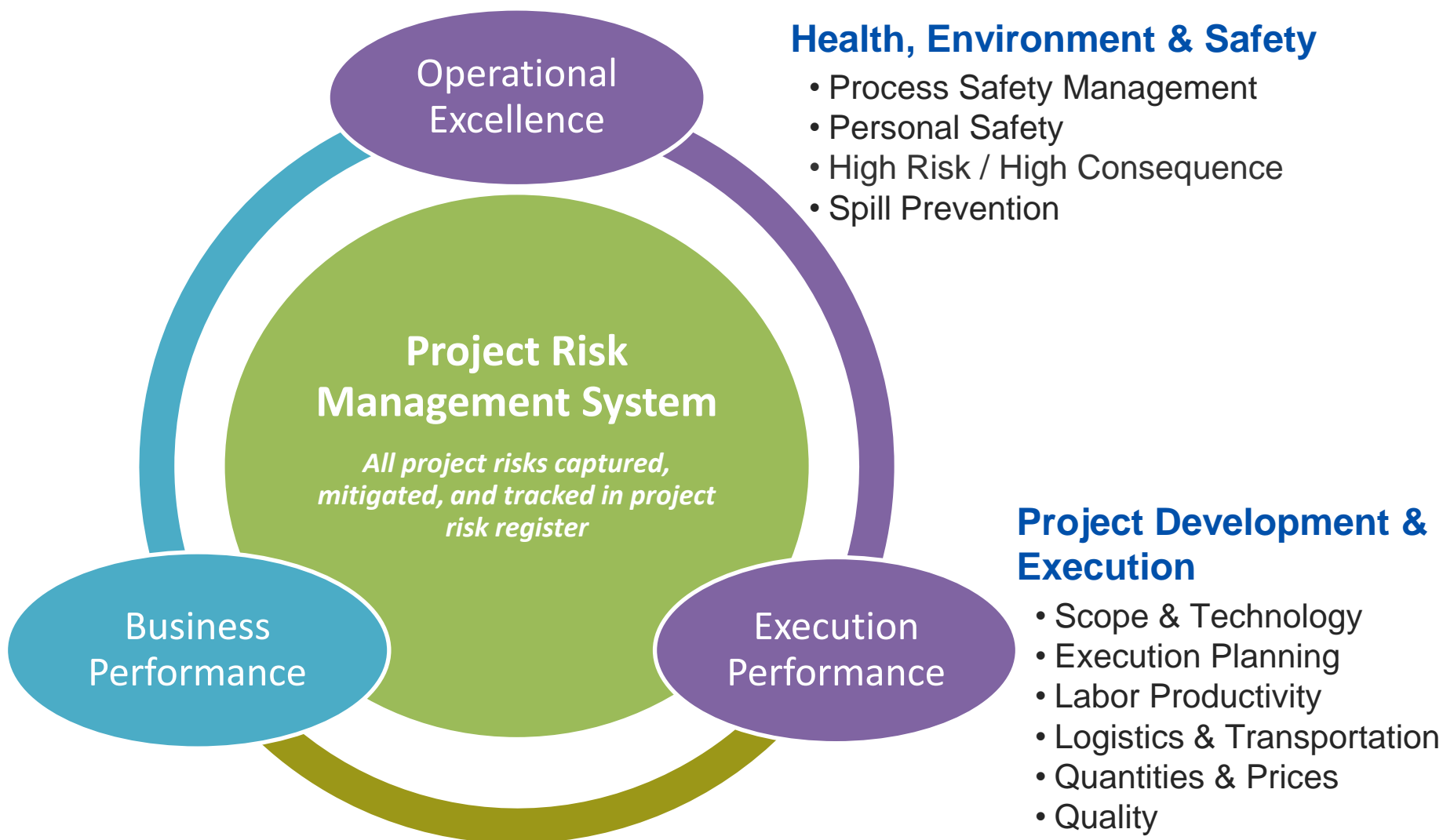


Partners in Safety Improvement

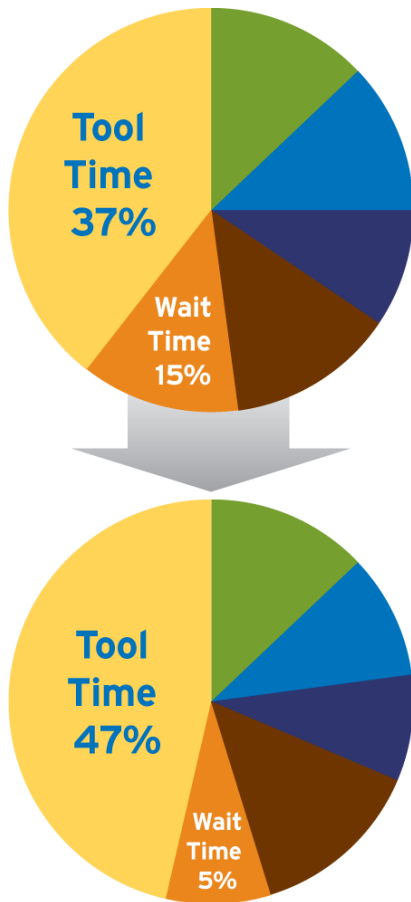
Total Recordable Incident Rate (TRIR) & Days Away From Work Rate (DAFWR)
Over Time – Chevron Relative to Industry



**American Petroleum Institute's Benchmarking Survey of Occupational Injuries, Illnesses, and Fatalities in the Petroleum Industry data are used as industry benchmarks. 2010 benchmark data were not available at the time of publication.*



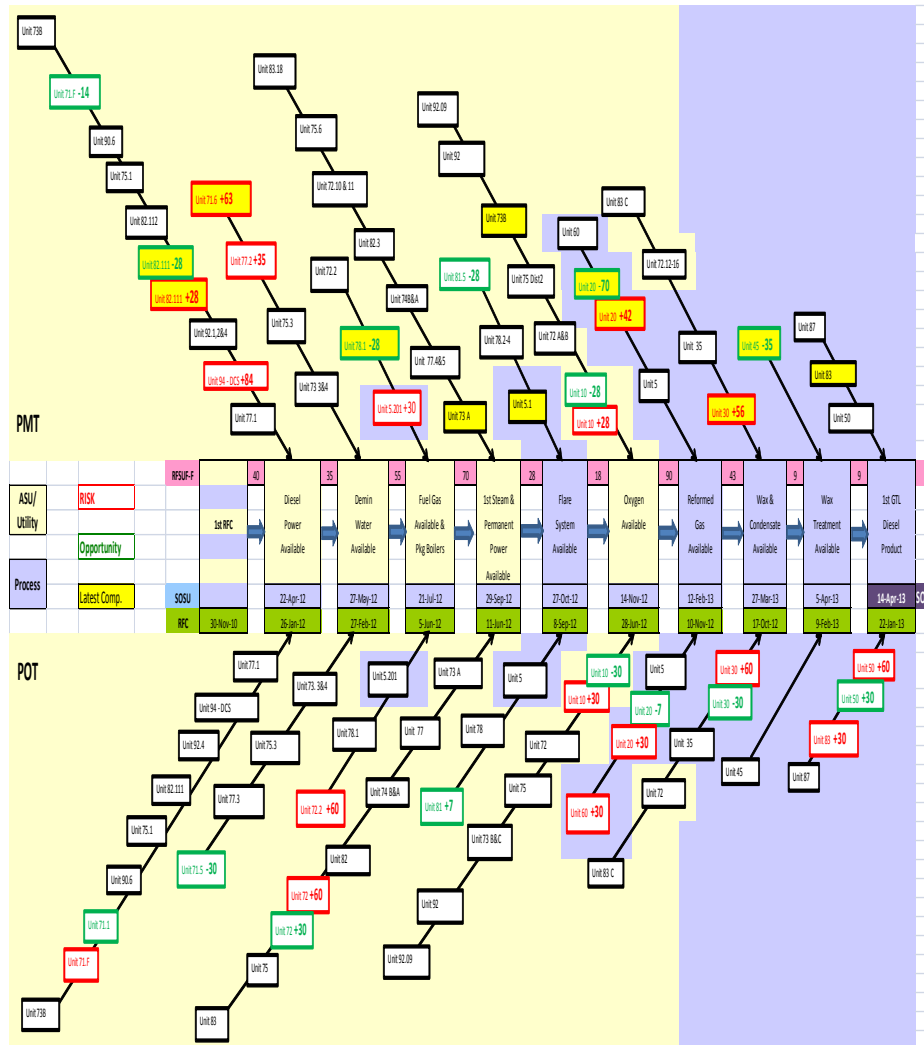
Construction Management & Workforce Planning— Driving Craft Productivity in Nigeria



A 10% increase in tool time
results in a 25% improvement
in productivity



System Completion & Transition to Operations— Achieving Production Attainment Goals



Planning in
Engineering

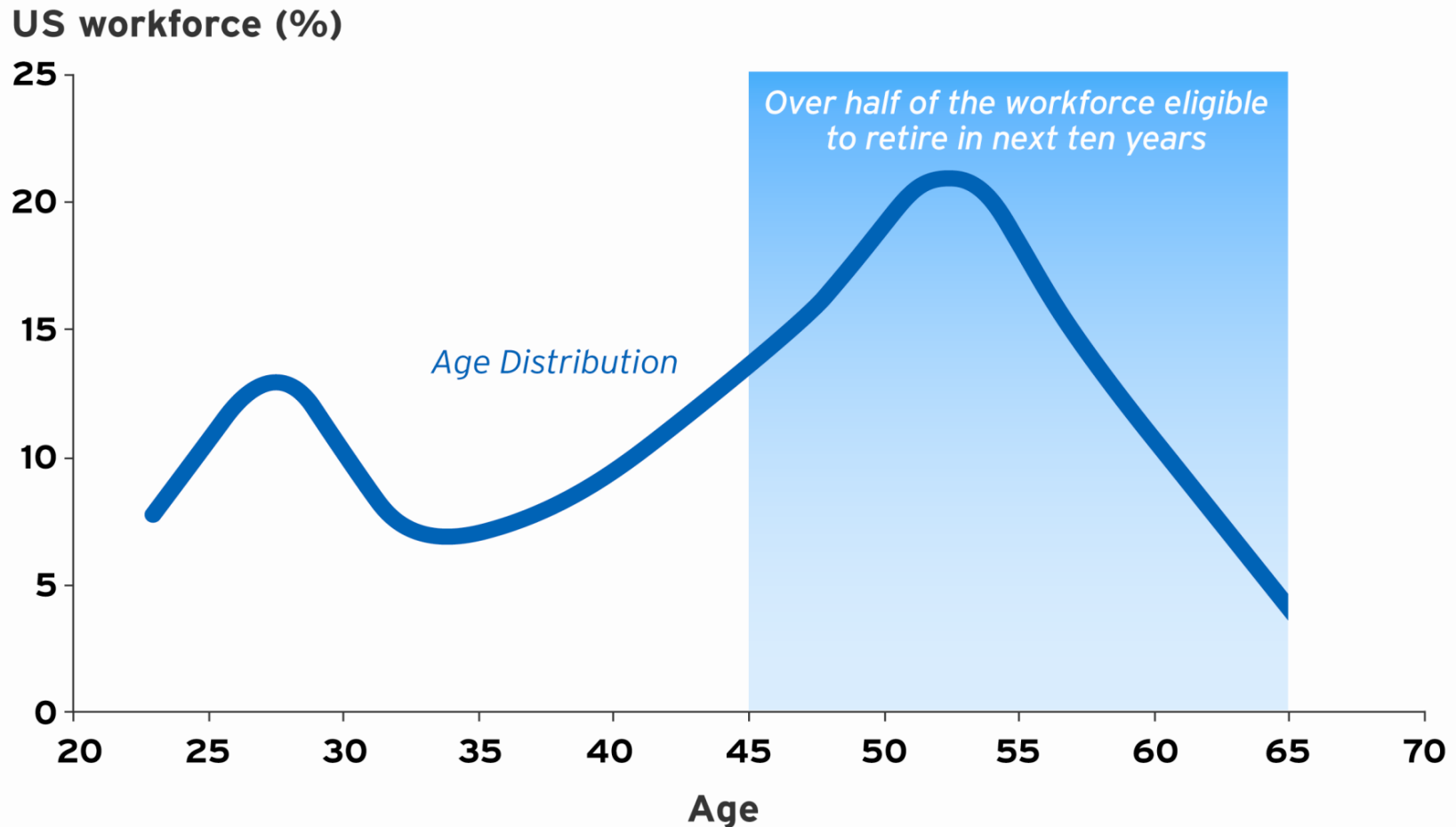
Execution of
Systems
Completion

Transition
Facilities to
Operations

Organizational Capability Challenge— Transfer of Competencies to New Leaders



Example of the US Workforce

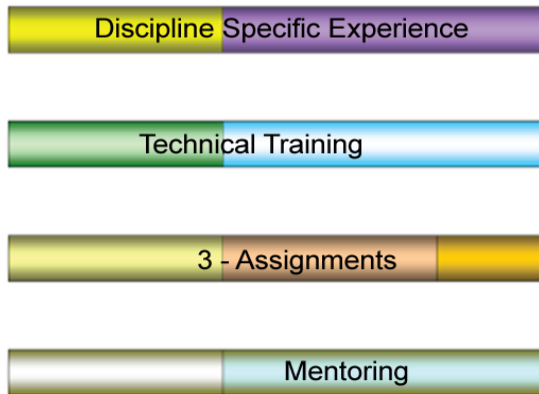


Source: US Dept of Labor

Investing in People— Building PRC Organizational Capability



Horizons Program



Pathways Program Technical & Professional Competency Development



Competency Maps

Cross Discipline Reference Competency Maps
Procurement / Supply Chain Management Competency Map

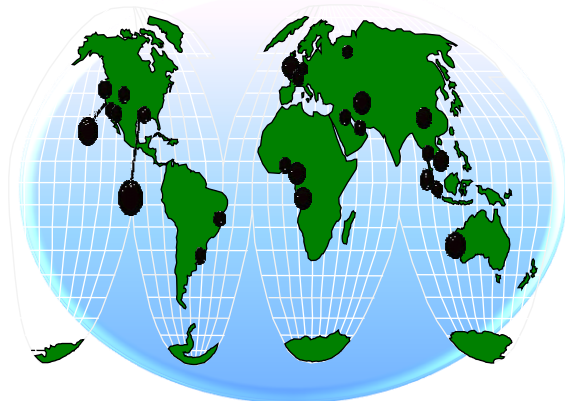
Contract Management 32 (0, 10, 14, 0) 41\$

Percent Complete

Skill Summary

Skill	Awareness	Basic Application	Skilled Application	Mandatory
Supplier Partnering Concepts	Green	Yellow	Red	Red
Terms and Conditions	Green	Yellow	Yellow	Red
Types of Contracts	Green	Green	Red	Red

PM Org Capability



Major Capital Project Leadership Development



Project Management Academy



Structure for Success— Centers of Expertise Organization



Ensuring Competitive Project Delivery In a Megaproject World



- Manage robust portfolio, increasing project scale, technical and execution complexity
- Close gaps in Project Management Systems
- Partnering to improve execution
- Aggressive focus on mitigating risks
- Drive standard approach for managing core areas of practice
- Prepare next generation of project leaders



Questions + Answers