

Agenda

- Introductions
- QGC/QCLNG Overview – Chris Barber
- Lean Construction Theory put in to Practice – Mark Leader/Rob Turner
- Outputs and Results on QCLNG Project – Grant Puttergill
- Envision Demo – Hugh Hofmeister/All
- Open Forum and Questions - All

Introductions

<https://www.youtube.com/watch?v=Y7XW-mewUm8>

QGC/QCLNG Overview

“Adapt to win” – How Australian oil and gas companies improve productivity in challenging times

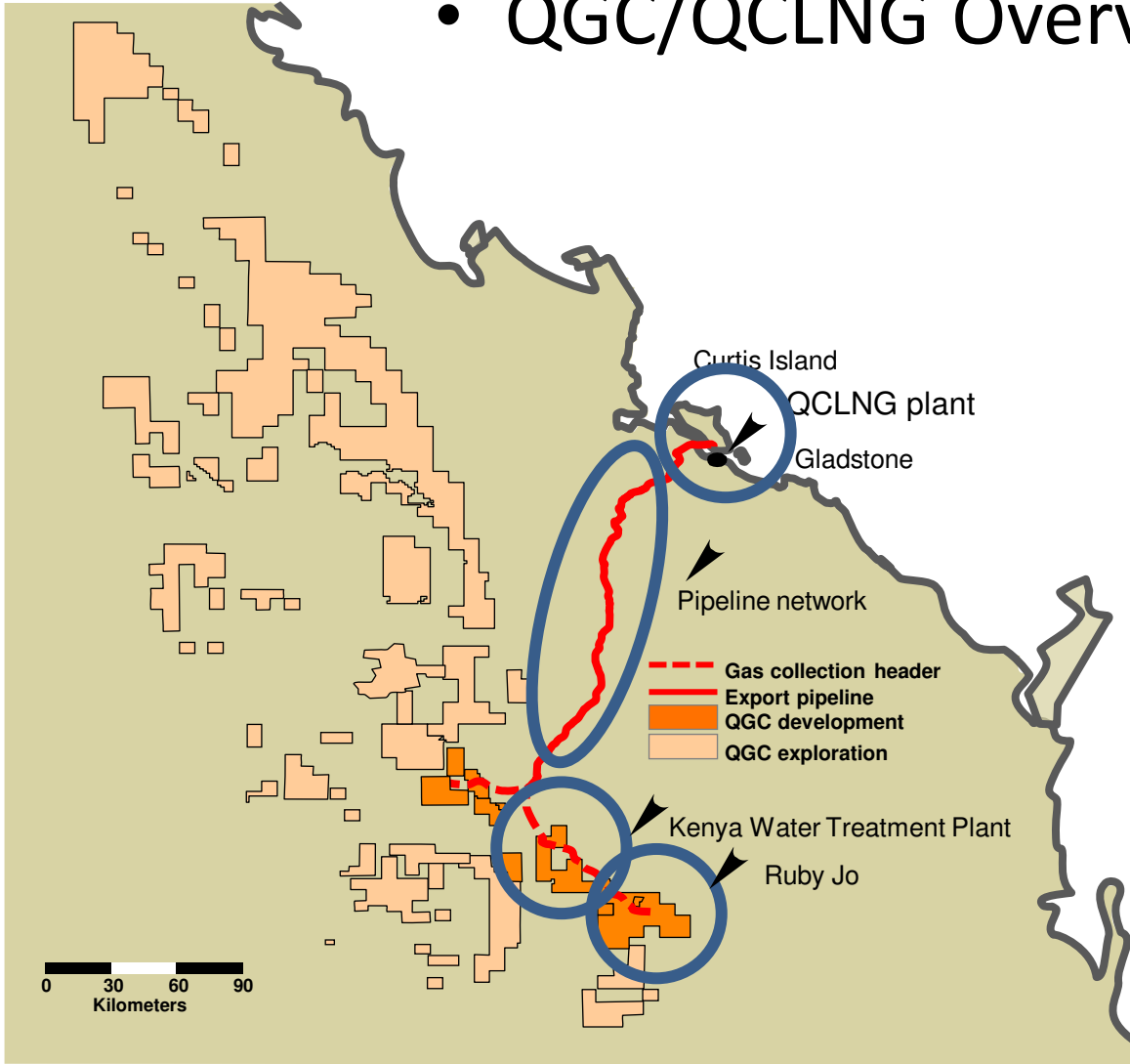
Report by Ernst & Young in collaboration with UQ Business School

- *“55% of Oil and Gas Firms in Australia are failing to measure productivity”*
- *“Of the organisations that do measure productivity, 52% report that they have improved their productivity as a result”*

Key findings of research – drivers of productivity are:

- Innovation
- Competitive Capabilities
 - Comparative advantage
 - Adaptive advantage
- Collaboration

• QGC/QCLNG Overview



Upstream:

- >2000 wells
- 19 field compression stations
- 4 central processing plants
- 2 major water treatment facilities

Pipeline:

- 196 km gas collection header
- 347 km export and narrows pipeline

LNG plant:

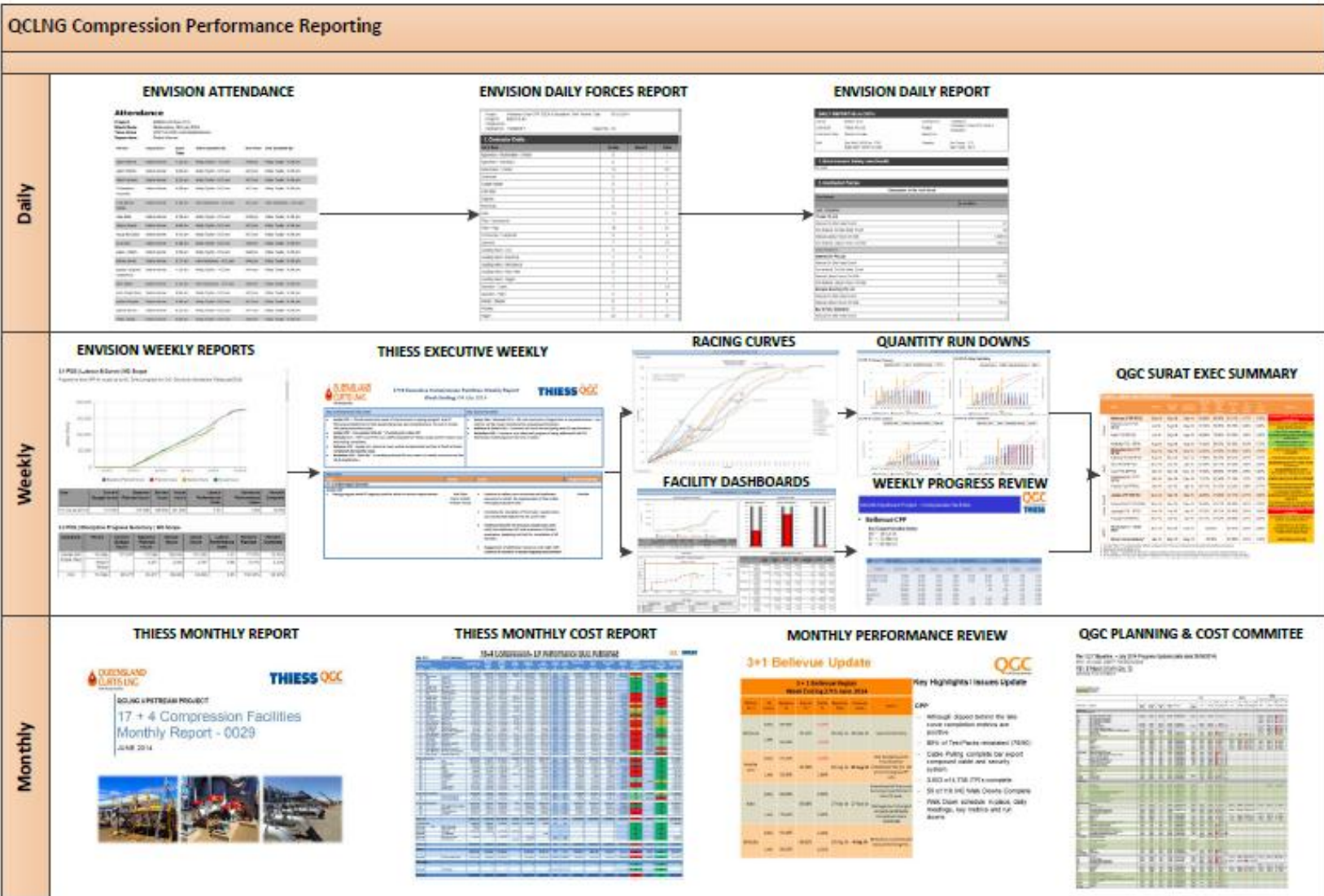
- 2 Trains; 8.5 mtpa; 80 modules
- 2 LNG storage tanks

Lean Construction Theory put in to Practice

- Lean Construction is a production management-based approach to project delivery.
- Lean is focused on the achievement of three key outcomes:
 - Maximising value from the view of the customer;
 - Eliminating waste (non-value adding processes);
 - Creating smooth and reliable flow of activity.
- As a result:
 - Work is structured throughout the process to maximize value and to reduce waste-at the project delivery level.
 - Efforts to manage and improve performance are aimed at improving total project performance, because this is more important than reducing the cost or increasing the speed of any particular activity.
 - "Control" is redefined from "monitoring results" to "making things happen." The performances of the planning and control systems are measured and improved.

Production Efficiencies in Construction

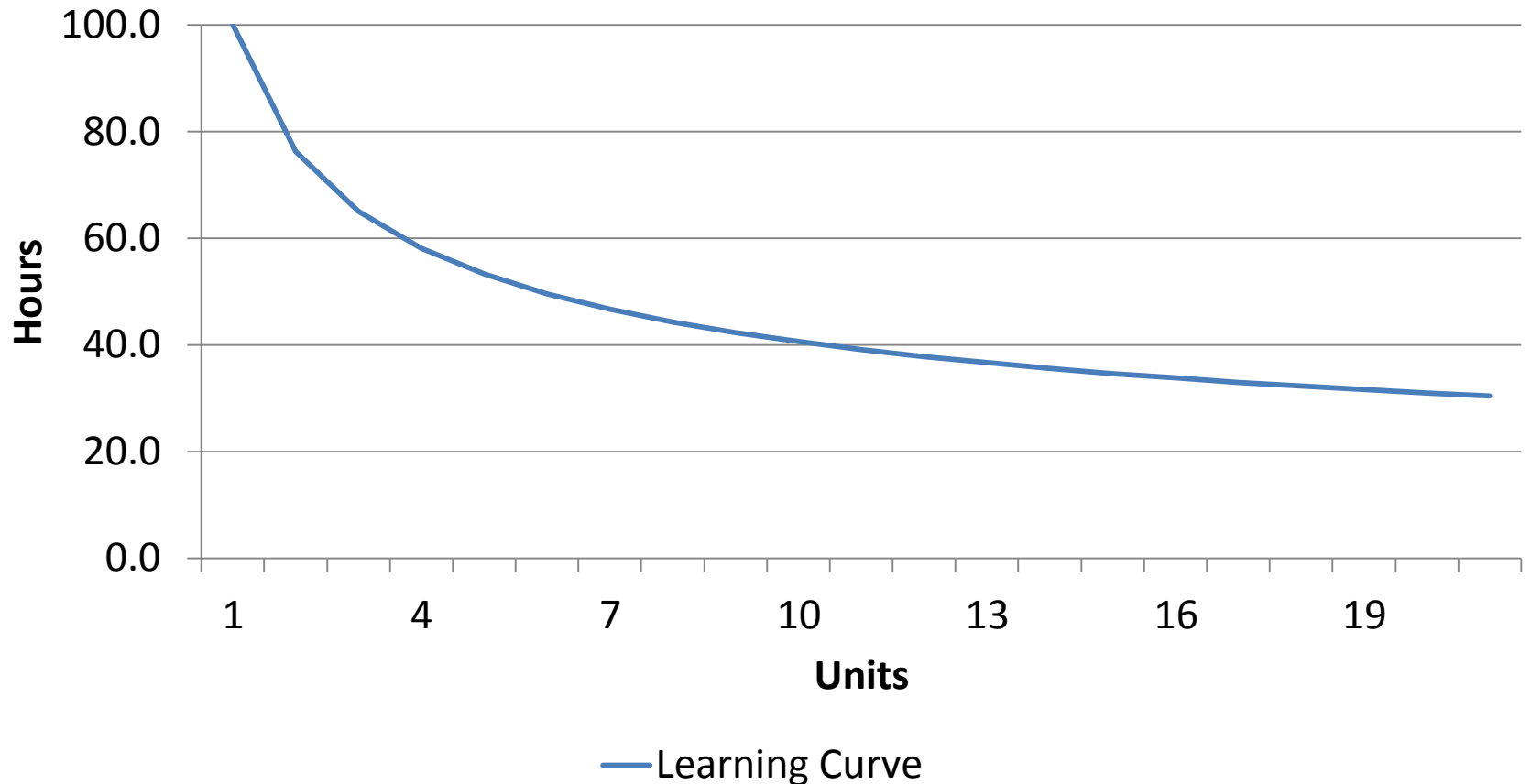
Lean Construction Theory put in to Practice



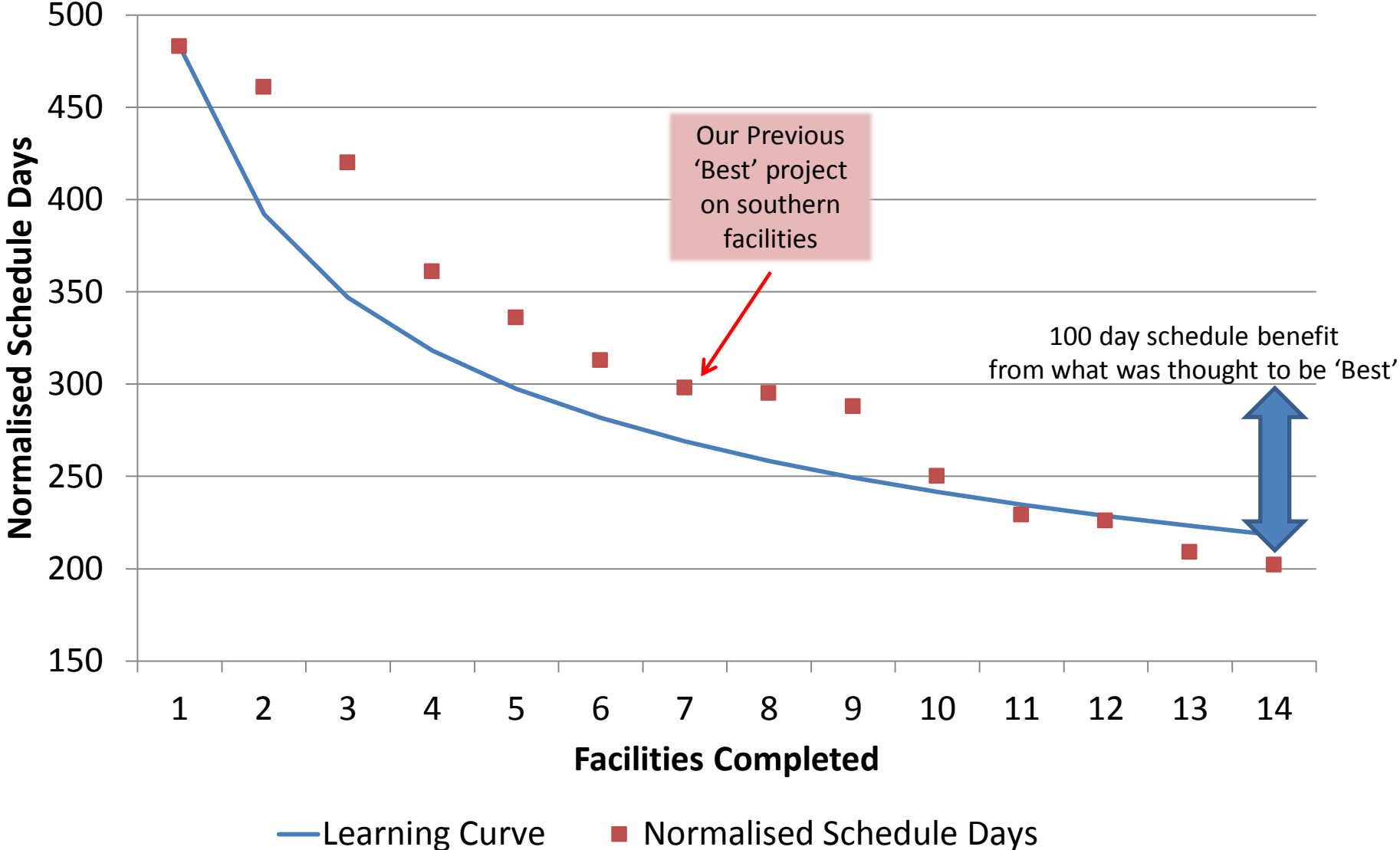
Outputs and Results on QCLNG Project

- Learning Curve Theory

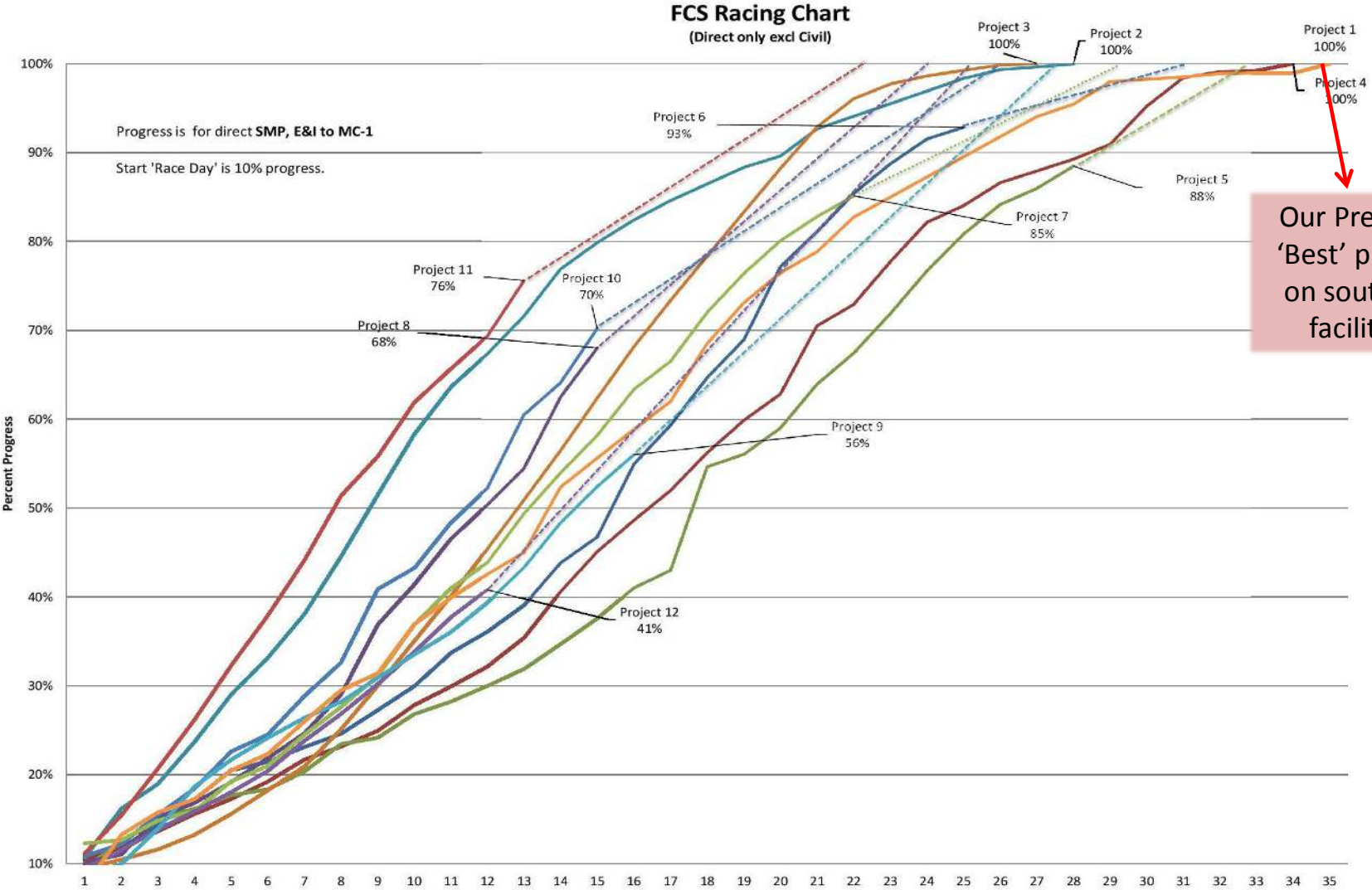
Traditional Learning Curve



Production Efficiencies in Construction



Production Efficiencies in Construction



Our Previous 'Best' project on southern facilities

Envision demo

Open Forum and Questions