

# Unlocking the Bottom Draw

## A LIDAR JOURNEY

Date:  
Tuesday, 10 April 2018

Presented by:  
ALEX WEBSTER | Spatial Team Leader, Powercor Network Services





# The Bottom Draw

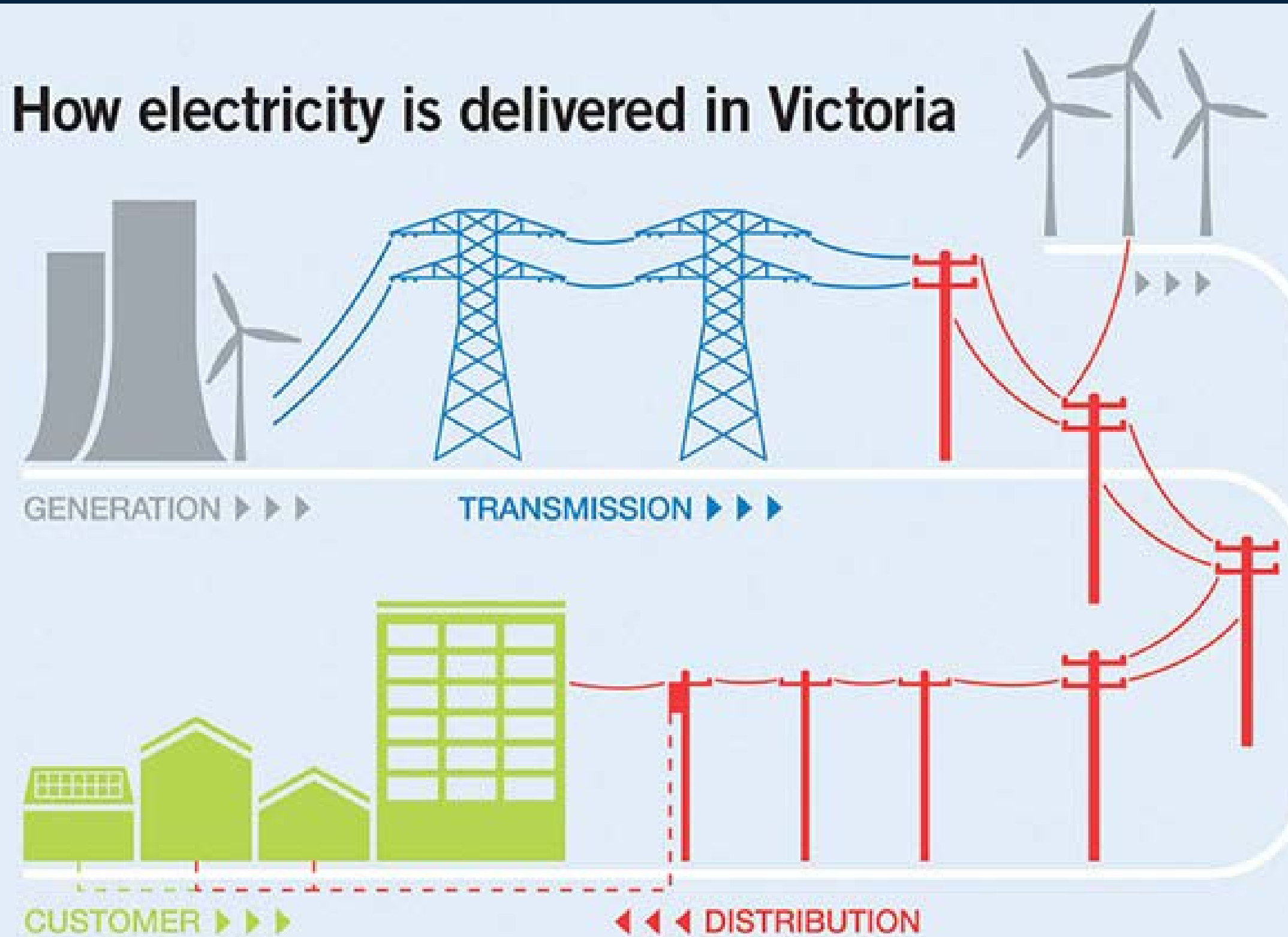




# Electricity Network



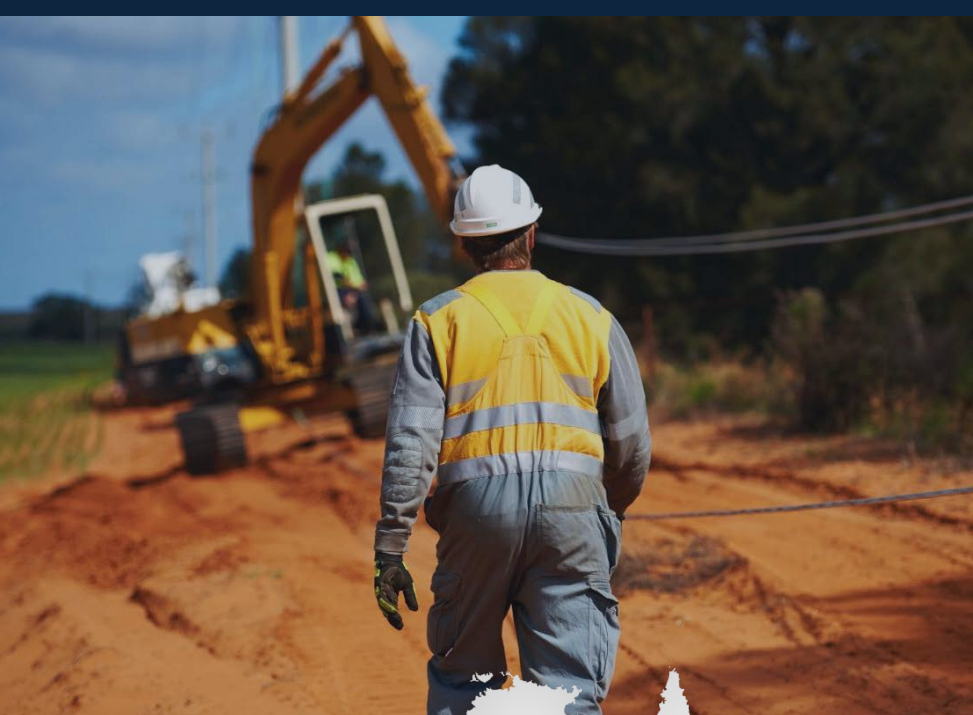
## How electricity is delivered in Victoria







# Network Statistics



### Powercor

Network line length	87,178 km
Network area	145,651 sq. km
Customers	778,836
Zone substation Tx	141
Distribution Tx	84,378
Poles	566,883
Underground lines	13%



### CitiPower

Network line length	7,536 km
Network area	157 sq. km
Customers	327,520
Zone substation Tx	102
Distribution Tx	4,797
Poles	58,092
Underground lines	43%





The background is a dark blue gradient with diagonal sections showing images of solar panels, a city skyline at night, and a wind turbine.

# Engineering Services Design Challenges

- Ensure compliance with 50+ Technical Standards
- 150 designer across 7 offices
- 3,000 jobs per year
- Ensure standard product
- External pressures to be efficient and competitive



# The Bottom Draw

TEA BAGS (\$1.50)

2017 PAL HBRA / LBRA  
(350,000 SPANS)

2010 9,000 SPANS  
2011 9,498 SPANS  
2012 5,333 SPANS  
2013 8,913 SPANS  
2014 9,000 SPANS

2008 1,200 SPANS

2015 24,500+ SPANS

2009 1,500 SPANS

2016 PAL HBRA (260,000 SPANS)





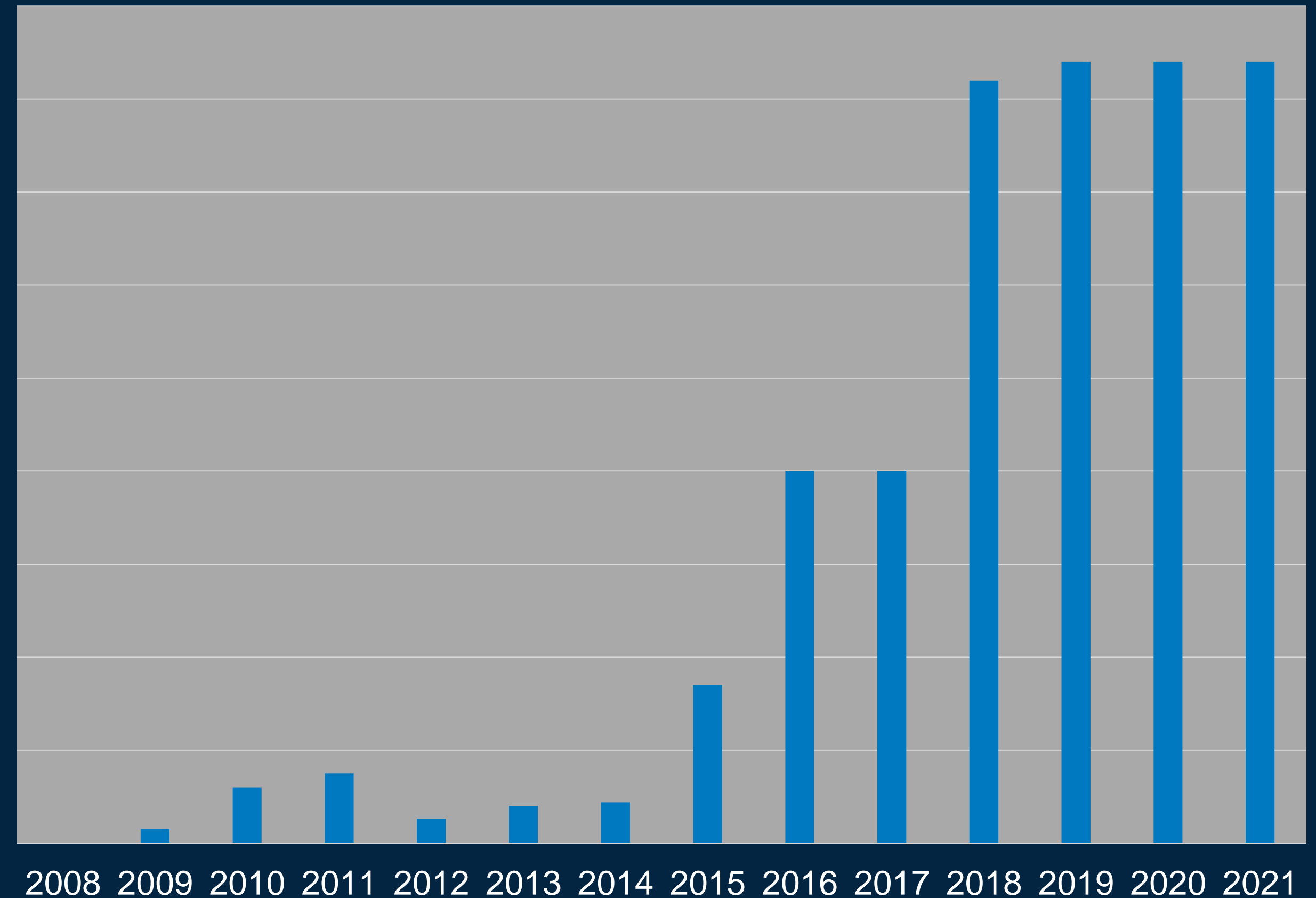
# Adoption of Lidar

## Bushfire Mitigation Program

- Vegetation Clearance
- HBRA Annual
- LBRA 2-3 Year Cycle
- VBRC Multi-circuit (HBRA / LBRA)

## Engineering Services

- Substation Design
- Pit Scans
- Sag & Sway



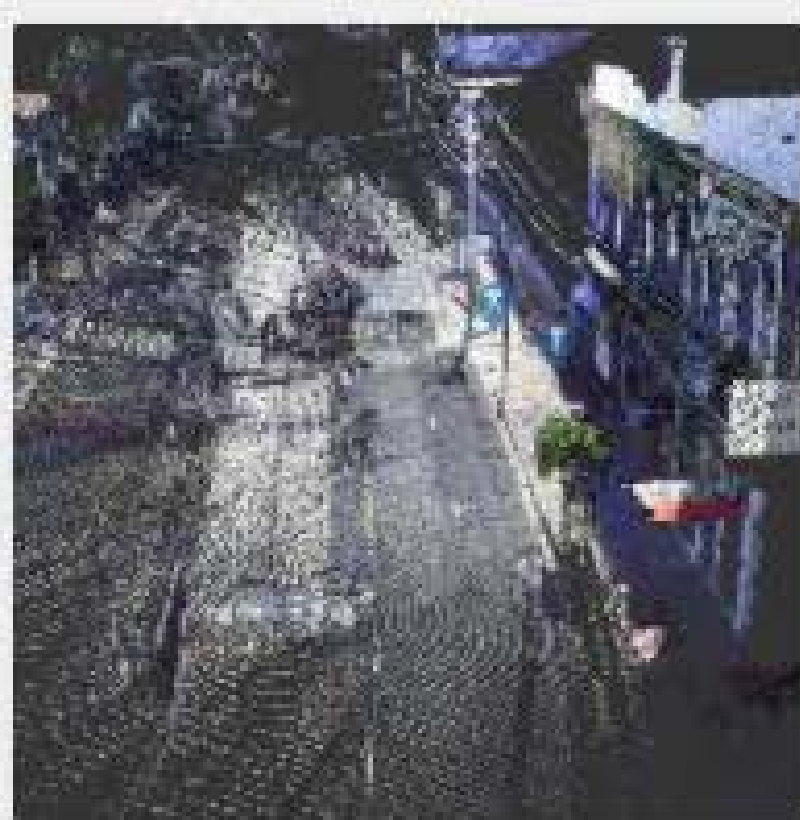




32-34 Burwood Road, Hawth...  
CHED Services 34.5M



487 St Georges Road, Thornb...  
CHED Services 44.5M



531 High Street, Prahran  
CHED Services 11.8M



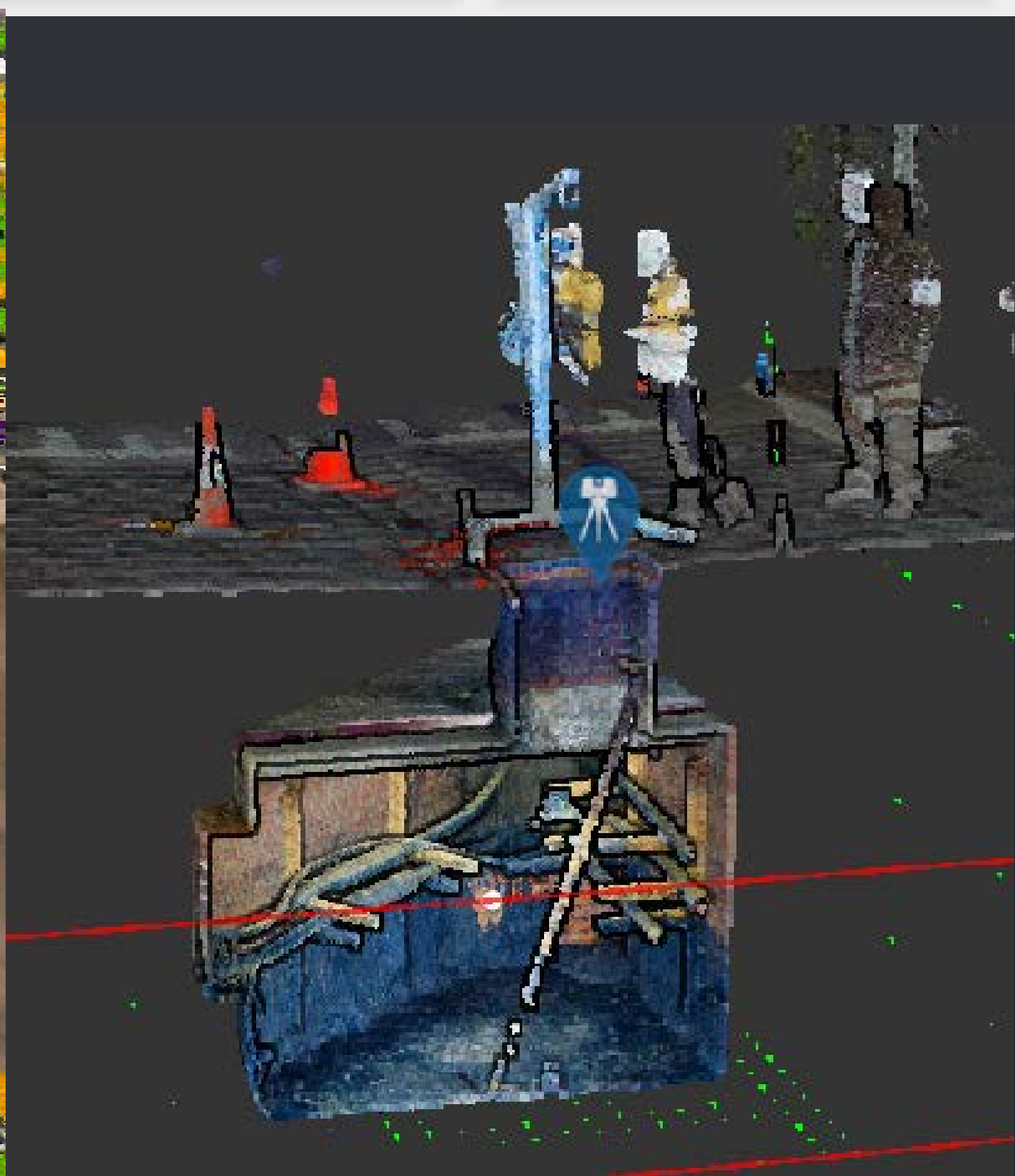
175 Miller Street, Fitzroy North  
CHED Services 20.1M



51-59 Palmerston Crescent, S...  
CHED Services 24.7M



235 Glenlyon Road, Brunswic...  
CHED Services 36.4M





The background of the slide is a dark blue diagonal collage. The top-left section shows a close-up of solar panels. The bottom-left section shows a white wind turbine against a clear blue sky. The right section shows a night-time view of a city skyline with many lit-up buildings.

# The Challenge

- Coordination within large organisation
- Leverage existing investment
- Governance
- Raise the profile





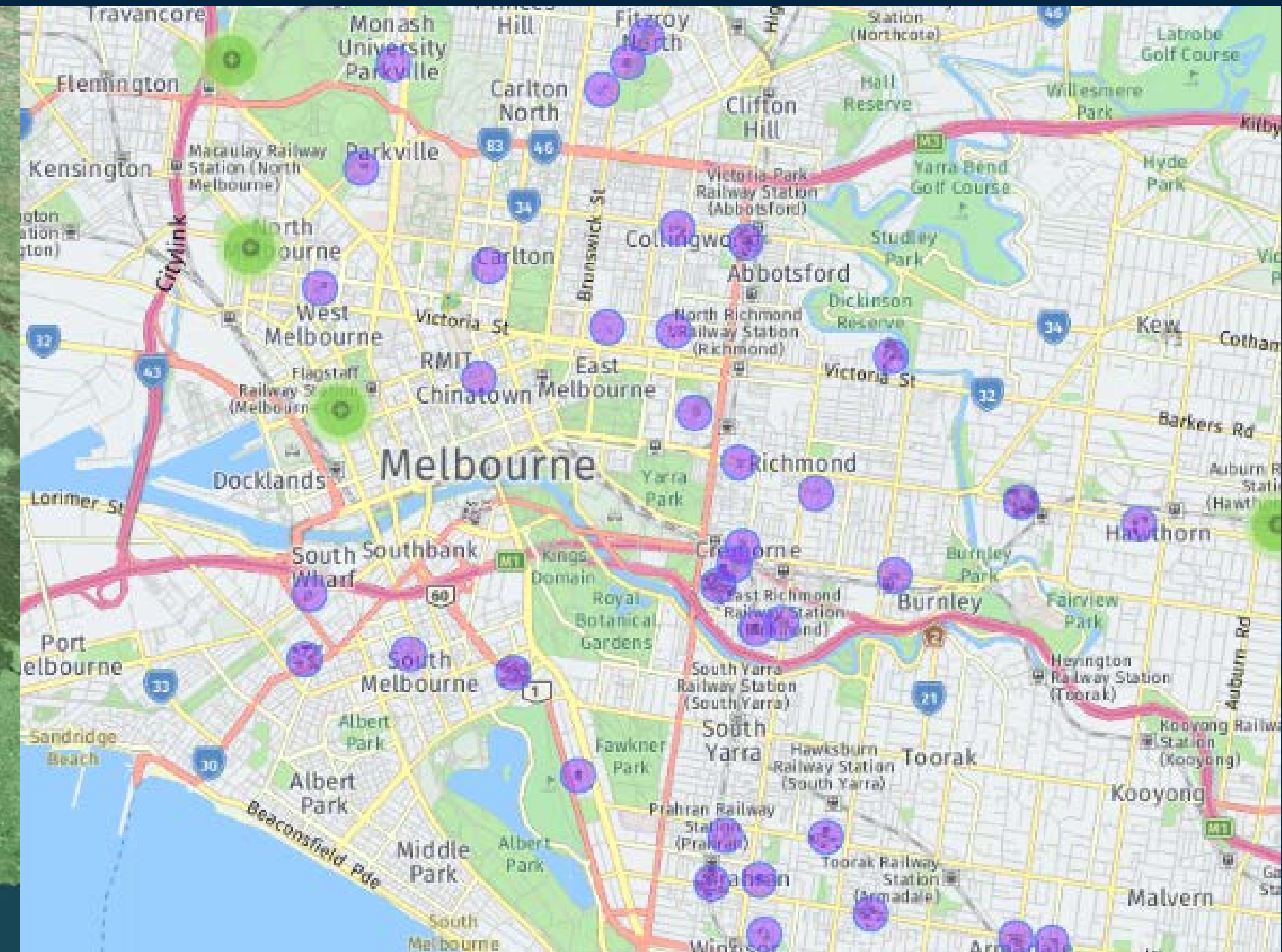
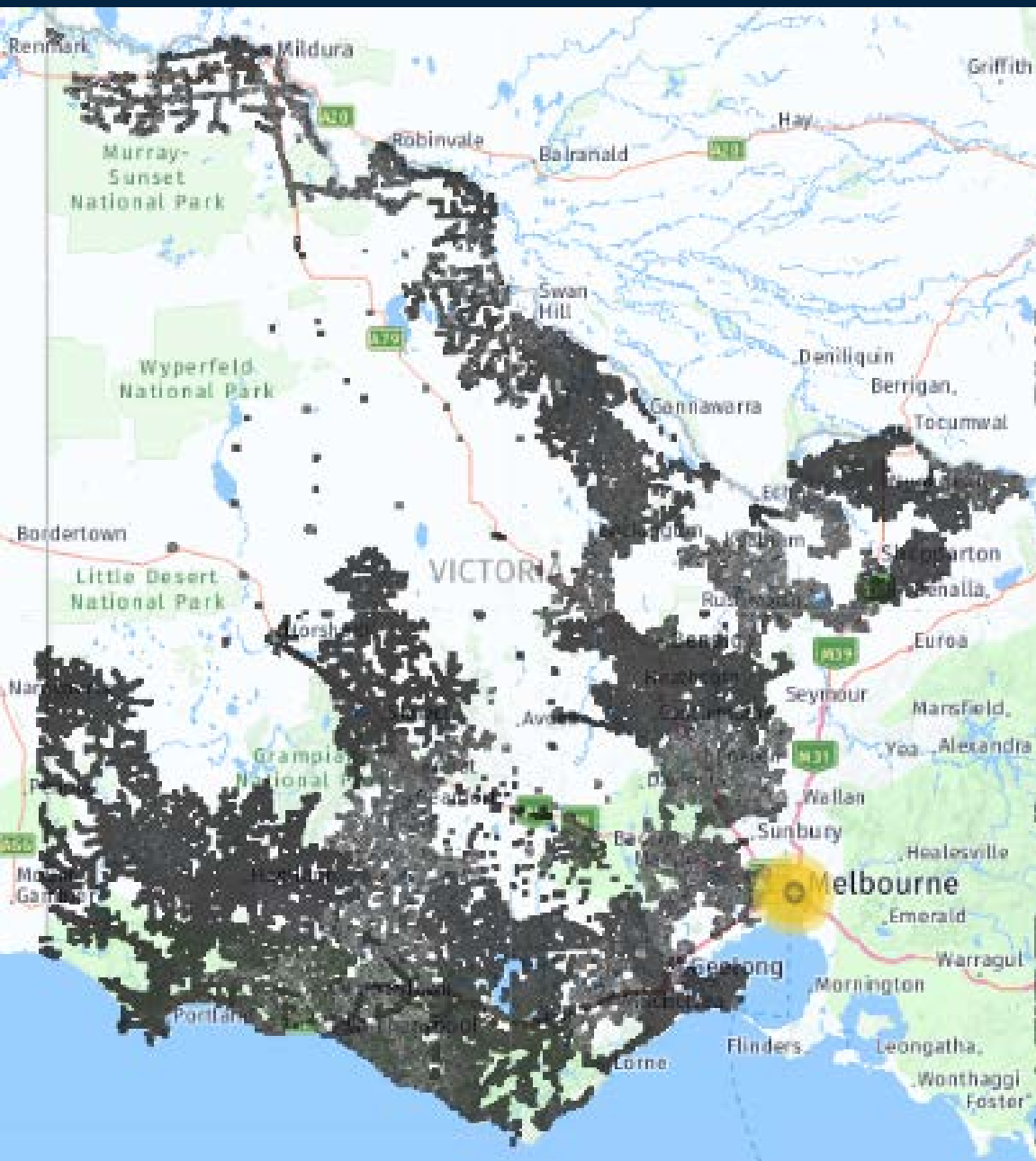
# The Approach

- Better Coordination
- Centralise Storage
- Build Momentum

*THE AIM OF CHANGING THINKING ABOUT LIDAR  
FROM DATA TO ASSET*



# Better Coordination



SHARED TENDERING

COFFEES

AGREED SPECIFICATIONS

COMMUNICATIONS

SINGLE PASS CAPTURE



# Centralise Storage

## PAST



- SINGLE PURPOSE CAPTURE
- INACCESSIBLE
- UNDISCOVERABLE

## PRESENT



- STANDARD SPECS
- QA
- CATALOGUED

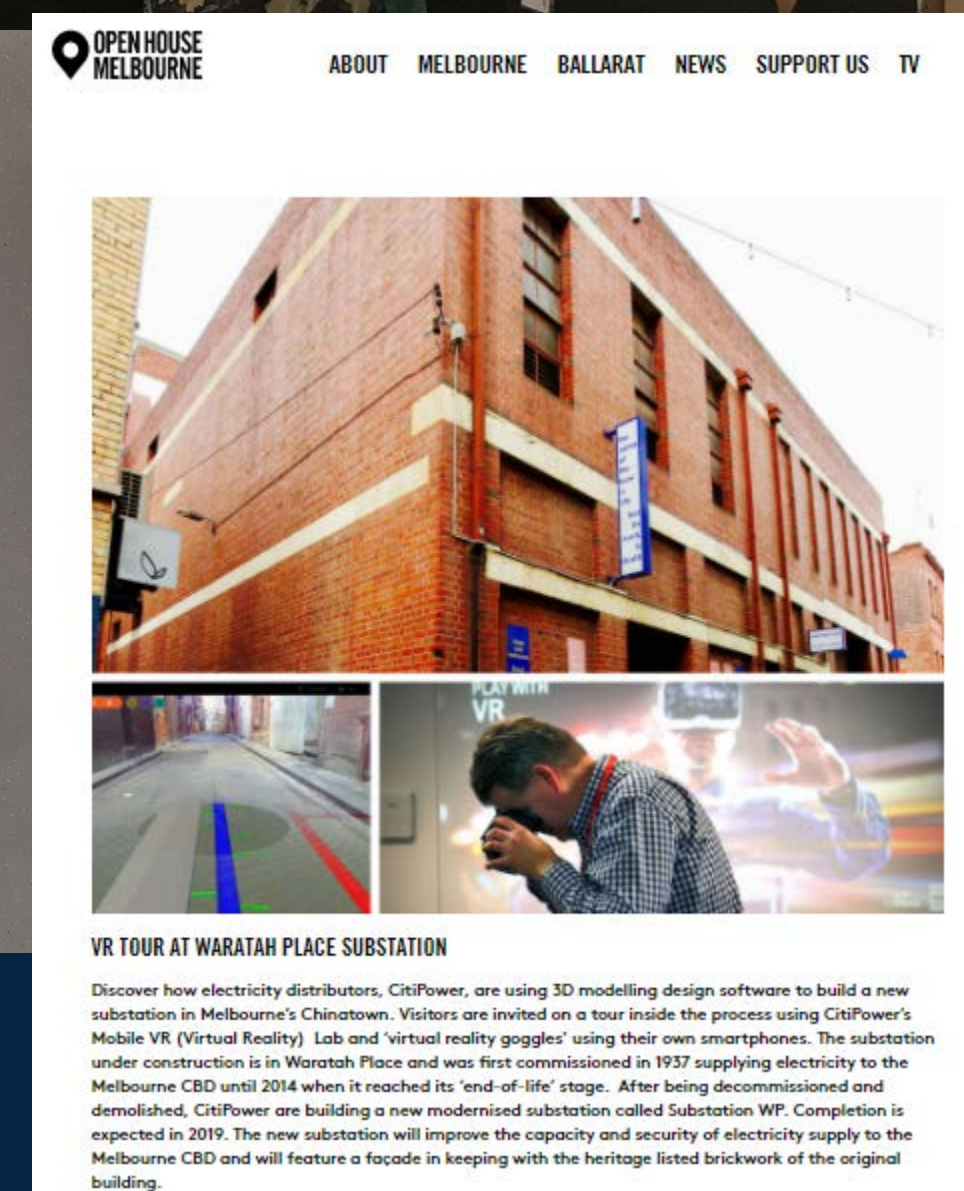
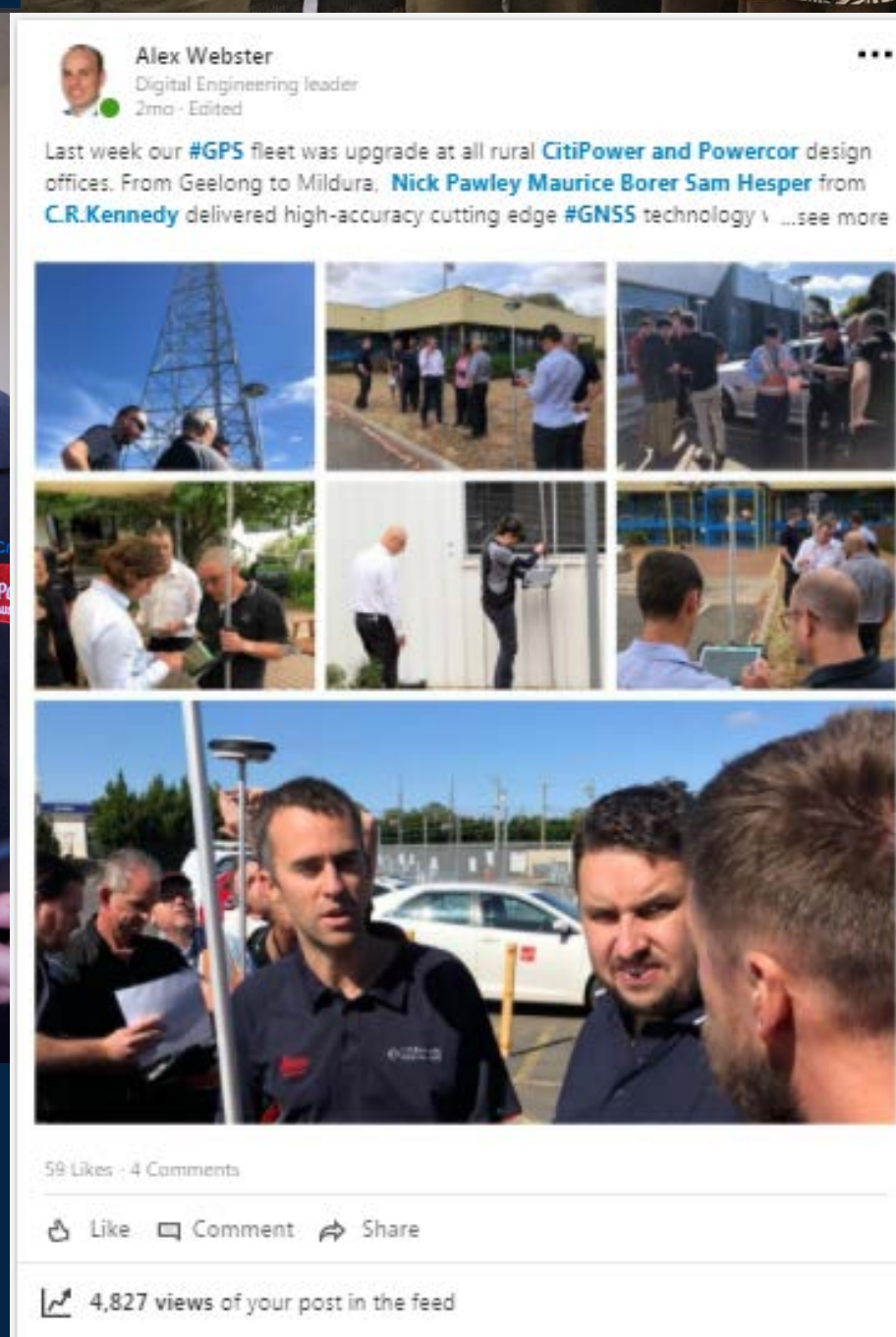
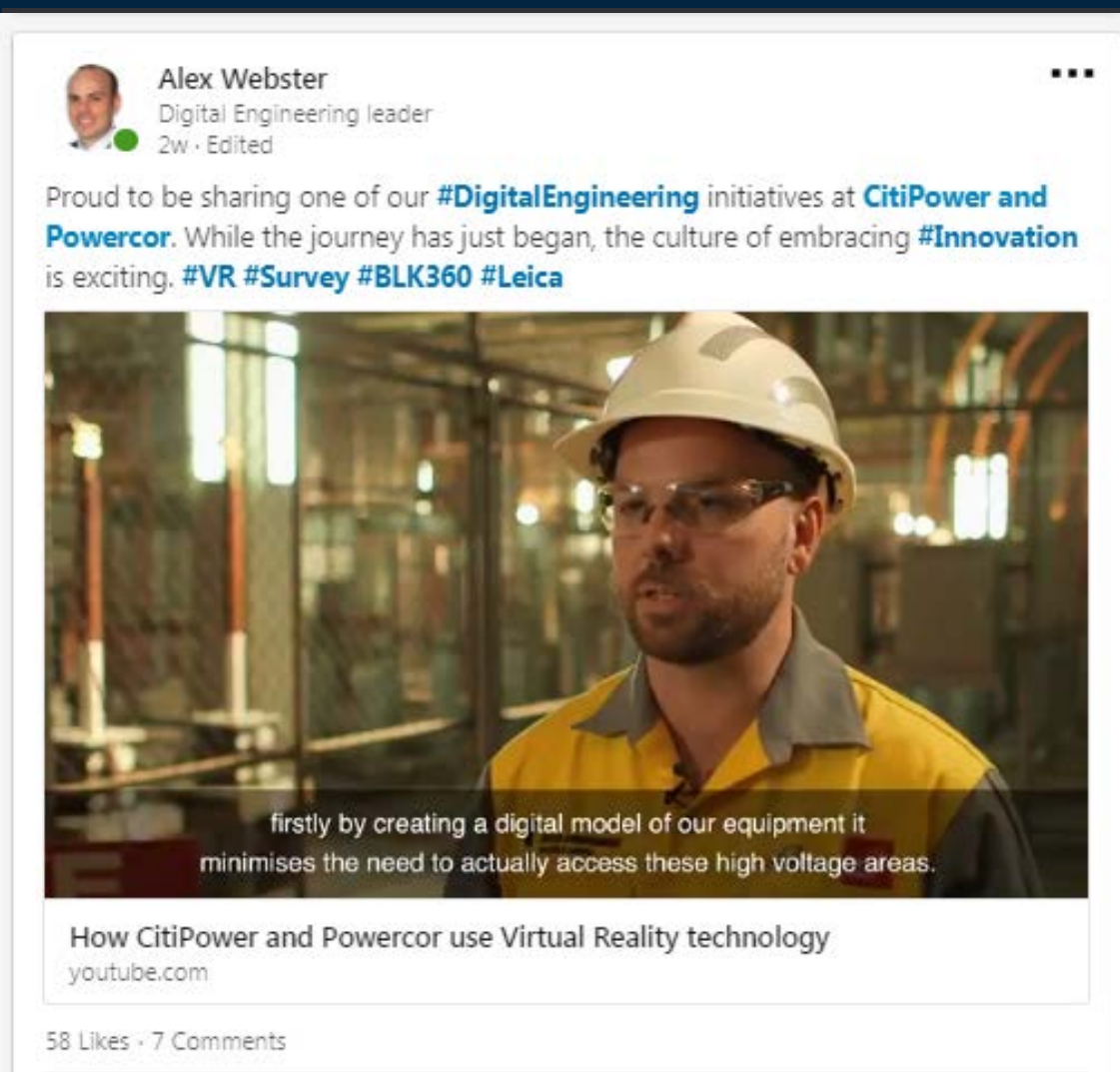
## FUTURE

LIDAR  
ASSET

- ENTERPRISE ACCESS
- DISCOVERABLE
- DERIVED PRODUCTS



# Build Momentum



INTERNAL NEWSLETTERS

LINKEDIN POSTS

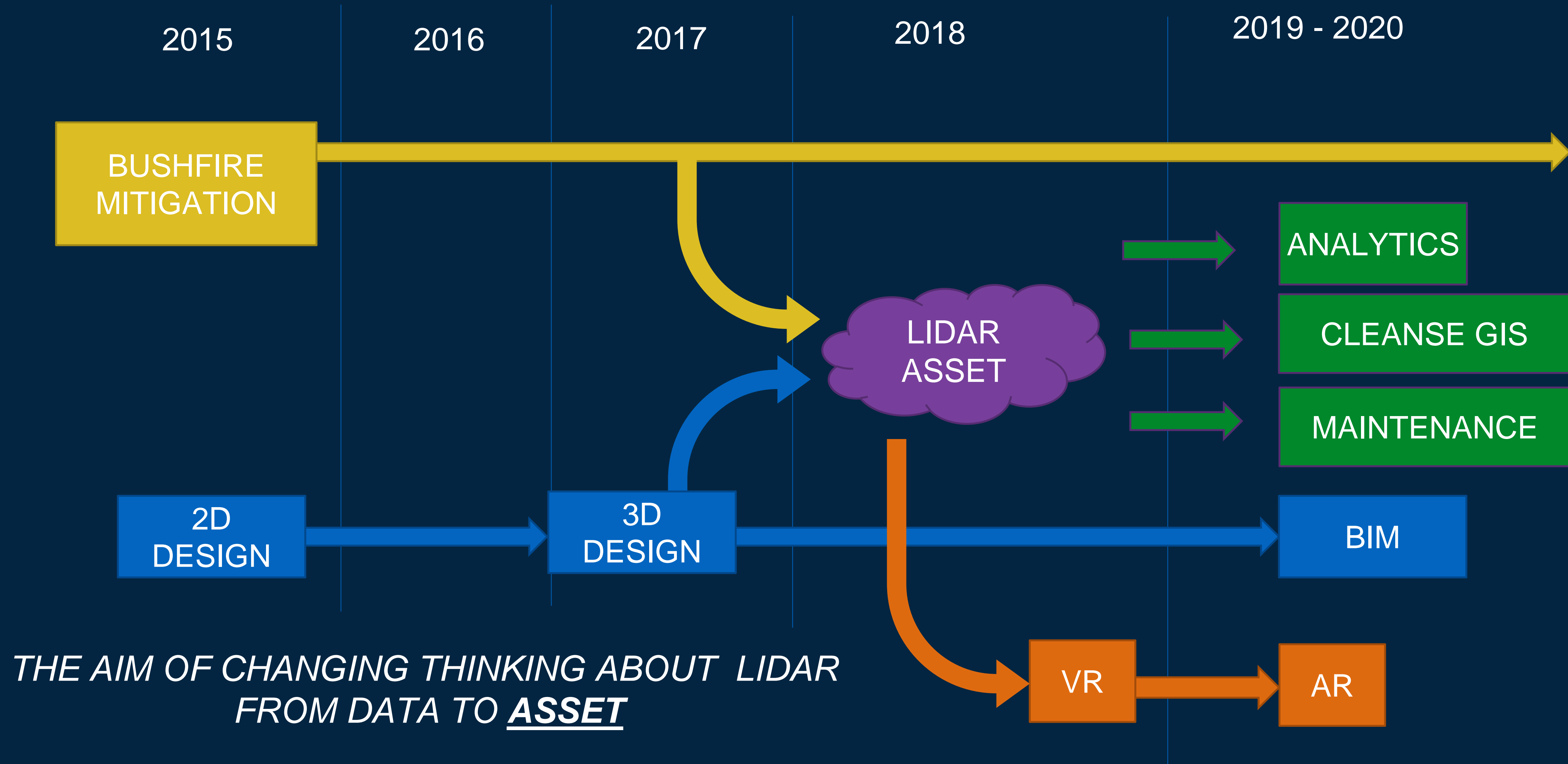
PUBLIC PRESENTATIONS

LUNCH & LEARN

EXECUTIVE BRIEFINGS

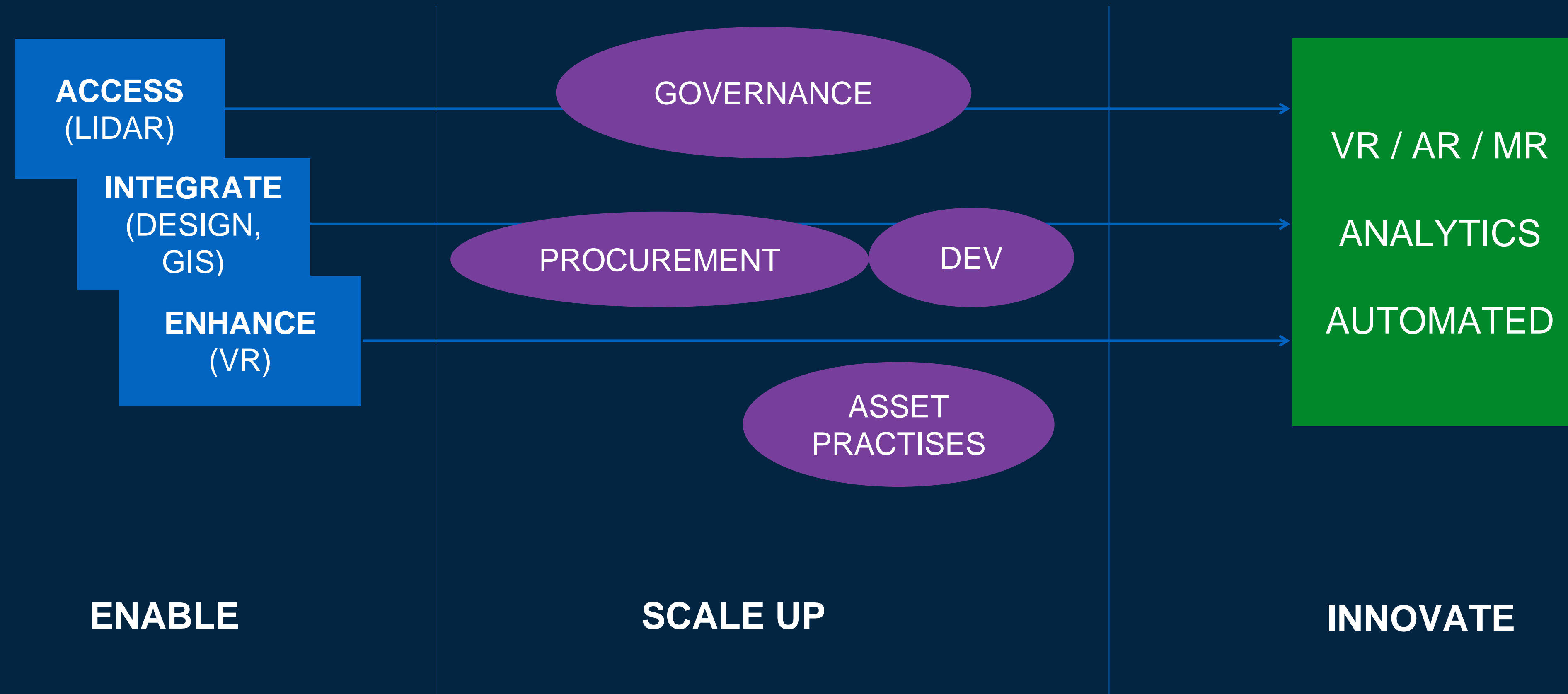


# The #DigitalEngineering Journey





# Creating a LiDAR Asset





THANK YOU

