

#### **Community Industry Forum**

10 August 2022

# Agenda

- 1. Welcome to Country
- 2. Apologies
- 3. Confirmation of Minutes
- 4. Action Items / Governance / Questions on Notice
- 5. Guest Introductions
- 6. Guest Presentations:
  - Port Hedland International Airport Update: Dave Batic, Chief Executive 8. Officer
  - Spoilbank Marina Update: John Freimanis, Pilbara Ports Authority Project Manager
  - Wind Fence Construction Update: Johan Diedericks, BHP Project Delivery Lead

- 7. PHIC Update: Kirsty Danby, Chief Executive Officer
  - Pilbara Producers Forum
  - Port Hedland Air Monitoring
  - Next Gen education (SWASP and Train the Trainer)
  - LiDAR in Port Hedland
- 7. Other Items
  - **Meeting Actions**



# Introductions



PHIC acts collaboratively for the benefit of industry and the Port Hedland Community to ensure the long-term sustainable growth of the Port and the community.



Guests

John Freimanis, Spoilbank Marina Project Manager, Pilbara Ports Authority Johan Diedericks, Project Delivery Lead, BHP

#### Presentations







**Dave Batic** Chief Executive Officer John Freimanis Project Manager



Johan Diedericks Project Delivery Lead

## Port Hedland International Airport



#### **Dave Batic**

#### Chief Executive Officer



## Port Hedland Spoilbank Marina Update



#### **John Freimanis**

#### **Project Manager**



#### **BHP Wind Fence Construction**



#### **Johan Diedericks**

#### Project Delivery Lead – Wind Fences Project



#### **PHIC Update**



#### **Kirsty Danby**

#### Chief Executive Officer



#### **Topic 1: Pilbara Producers Forum**

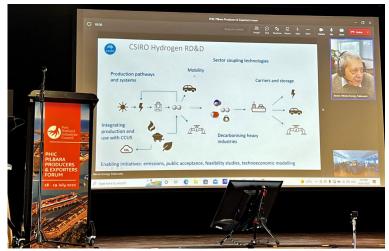




#### Pilbara Producers Forum











#### Pilbara Producers Forum











## Topic 2: LiDAR

PHIC is always looking to improve was to monitor air quality across Port Hedland. One technology that PHIC has investigated is LiDAR.

Discussion:

- 1. What is LiDAR used for and how does it work?
- 2. What did PHIC want LiDAR to measure?
- 3. How did PHIC assess whether it is a useful tool for Port Hedland?
- 4. What LiDAR trials have been undertaken in Port Hedland?
  - 1. CRC Care (2011)
  - 2. PHIC LiDAR trial (2014-2016)
  - 3. DWER (2017)
- 5. Is there a report that summarises the LiDAR trials?
  - 1. Port Hedland Industries Council (2020) avail on www.phic-hedland.com.au



## LiDAR and Port Hedland

#### LIDAR MONITOR TOP VIEW

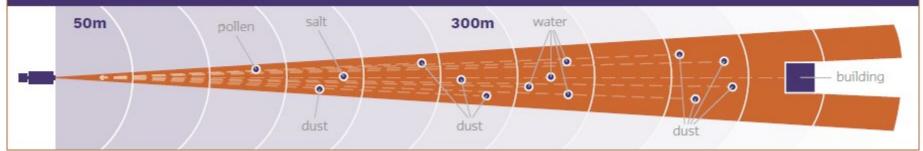
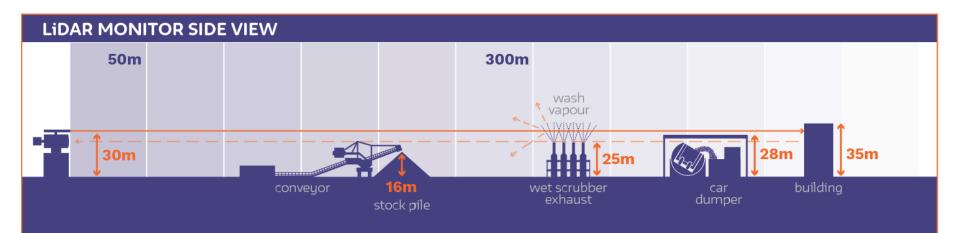


FIGURE 1 - LiDAR measures all particulate matter in the atmosphere including, dust, pollen, salt, water vapour and other suspended particles. The measurement doesn't differentiate between types of particulate matter, it provides relative concentration bands of matter. This can lead to data misinterpretation.

FIGURE 2 LiDAR only operates at the level it has been set. The return signal only monitors either elevated sources or plumes that have reached the scan height



# LiDAR limitations and findings

PHIC supports DWER's position around LiDAR limitations and that LiDAR is not suitable for regulatory purposes (outlined in DWER factsheet).

- 1. There is no Australian Standard for the operation of LiDAR
- 2. LiDAR is not acceptable technology or methodology for point source monitoring
- 3. Pre-processing of LiDAR monitoring is required before usable imagery can be developed so it won't show real time monitoring scenarios
- 4. LiDAR can't be used to measure PM10 in isolation
- 5. The visual representation of LiDAR is only two-dimensional representation of three-dimensional movement in particles in the atmosphere
- 6. LiDAR cannot distinguish between dust, smoke, water, bushfires, buildings or trees. This means that "red" indicators may be interpreted as dust when it could be a range of other factors (buildings, water, trees etc)
- 7. The reliability of data is best at close proximity, not in general atmosphere (Port Hedland Airshed) and the instrument reduces reliability at distance
- 8. Calibrating LiDAR against AS technology such as BAMs to confirm correlations is technical challenging and potentially unreliable



## LiDAR – more information

References:

https://www.der.wa.gov.au/images/documents/our-work/communityupdates/port-hedland/DWER\_DOH\_Fact\_Sheet - Port\_Hedland\_air\_quality.pdf

https://www.phic-hedland.com.au/index.php/2020/09/01/lidar-fact-sheet/

https://www.phic-hedland.com.au/wpcontent/uploads/2020/09/PHIC\_LiDAR\_Report.pdf

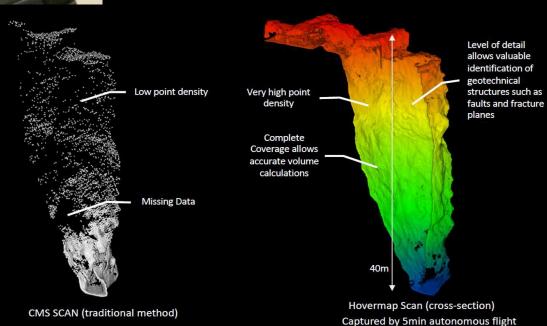
https://www.phic-hedland.com.au/index.php/news-and-resources/fact-sheets/



## LiDAR – other uses in mining



- 1. Geospatial activities
- 2. Laser surveying drones, underground and remote machines – loaders, trucks
- 3. Mapping geology and 3D terrains
- 4. Production volumes



## Topic 3: A change in Government





## A change in Ministers





## A change in commitments

- New carbon emission commitments Federal and State Governments
- Federal Government has now committed to a carbon emissions reduction target of 43 per cent below 2005 levels by 2030, and net zero emissions by 2050
- WA Government set a target to cut emissions from State assets by 80 percent by 2030





## A change in expectation

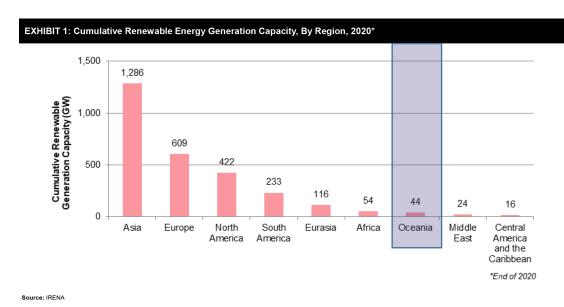
- Rise of the Teals
- New Member for Curtin Kate Chaney
- Federal Government will be managing expectations while also dealing with a larger cross bench for its legislative agenda





## A change in energy

- The push for renewables is growing - 170 countries pledged to harness their renewable energy potential through Paris Agreement 2015
- 2020 Australia's total installed renewable energy capacity was approximately 35.7 GW
- Australia globally behind on renewable adoption





# Topic 4: Port Hedland Air Monitoring

- Bimonthly report from Katestone for May and June 2022.
- There were no days above the 24-hour period for PM10 of 70 μg/m<sup>3</sup> at the Taplin monitoring station.



## **Topic 5: PHIC SWASP Presentation**





# Coming up



- 1. Train the Trainer 10 October
- PHIC Greater Port Hedland
  Vertebrate pest management end August
- 3. SWASP deployment
- 4. PHIC Associate Membership
- 5. Humans of Hedland
- 6. Positive Port Hedland
- 7. Local advertising



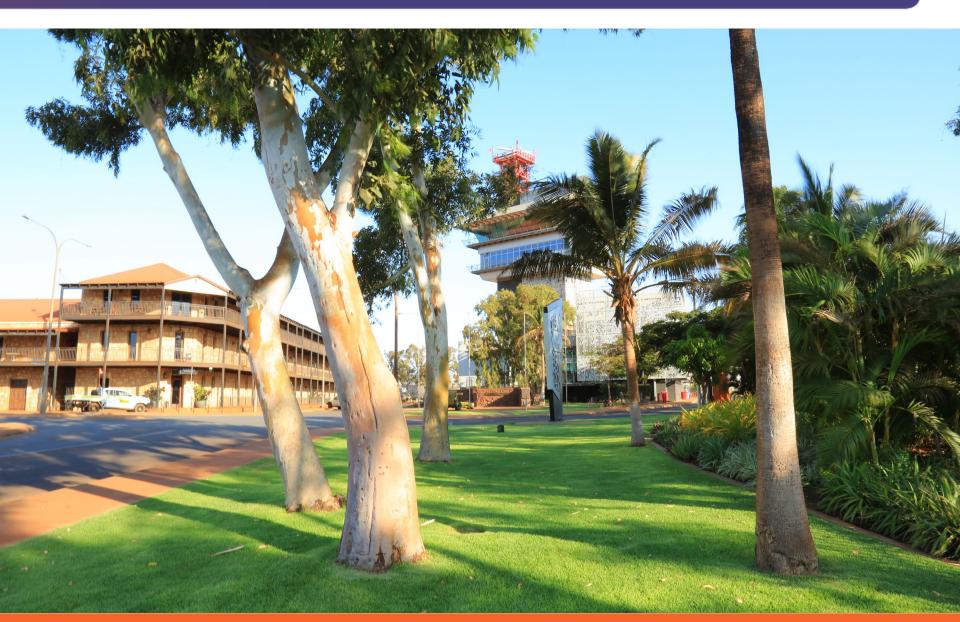
# Questions





# Other Business





#### **FUTURE AGENDA ITEMS**

The Community Industry Forum is our opportunity to work with you and understand your aspirations as we move to create a sustainable future for Port Hedland.

Ongoing growth of the Port will generate jobs and enable economic diversity through new local business opportunities.

By implementing the right plan for Port Hedland, we can ensure a vibrant vision for the Port Hedland and a thriving community.



#### Future meeting schedule

**Quarterly meeting upcoming dates** 

#### Wednesday TBA November 2022 Wednesday 8 February 2023



