



# Ammonia as a fuel for low-carbon mining

November 2020

Thriving communities | Global force



# Forward Looking Statements Disclaimer

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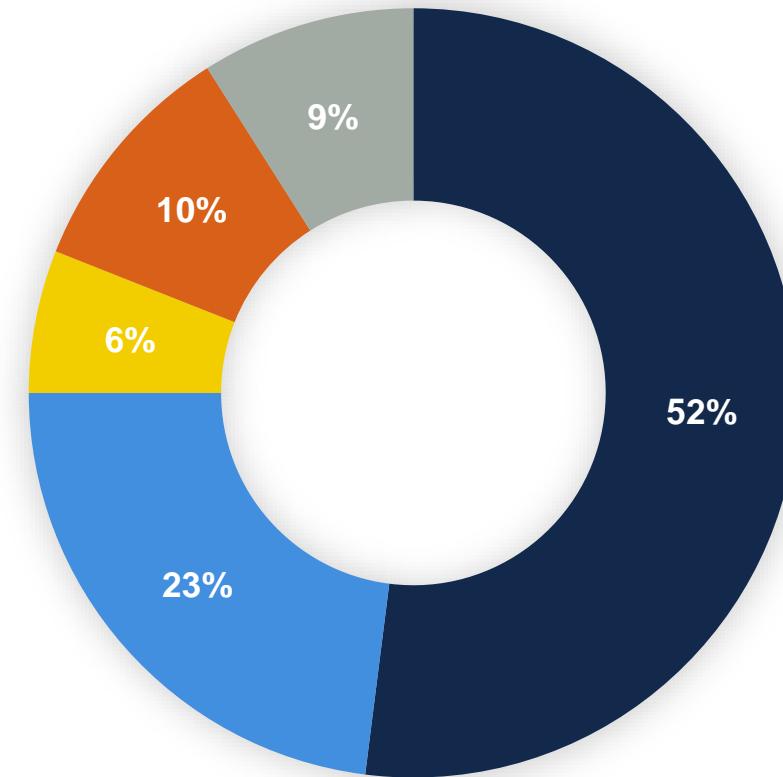
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# Emissions profile



## FY20 emissions in production process

- Mining fleet
- Power (Scope 1)
- Power (Scope 2)
- Rail
- Other



# Energy infrastructure

US\$800 million investment with our business partners will deliver  
25 to 30 per cent of stationary energy from solar power

## Chichester solar gas hybrid project



- US\$100 million investment by Alinta Energy
- 60MW of solar generation
- 60km transmission line linking Chichester operations with Alinta Energy's Newman gas-fired power station
- 35MW battery facility
- Displaces 100 million litres of diesel

## Pilbara Energy Connect



- US\$250 million Pilbara Transmission Project
- 275km of high voltage transmission lines
- US\$450 million Pilbara Generation Project
- 150MW of gas fired generation, 150MW of solar PV and large-scale battery storage

## Hydrogen



- Reduce carbon emissions and reliance on diesel in our operations
- Improving domestic energy security
- Export potential of green hydrogen from Australia
- Fortescue-ATCO partnership for domestic hydrogen mobility
- A\$32m mining mobility project

# CSIRO partnership



Development of technologies to enable green ammonia as an energy vector

## Metal Membrane Technology

For ammonia cracking; Hyundai MoU

## Internal combustion engines

Hardware and process development for ammonia-fuelled internal combustion engines

## Locomotives

At-scale demonstration



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