# WOODSIDE'S BURRUP HUB

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### **WOODSIDE'S BURRUP HUB**

video: Honest Government Ad | Visit WA! 🏝 / by the juicemedia







**Location**: Burrup Peninsula (Murujuga), WA



**Operator**: Woodside Energy (+ Shell, BP, Chevron)



**Components**: Scarborough Gas Field, Pluto LNG, Browse Basin



Investment: AU\$50+ billion



Timeline: Operating through 2070



**Emissions**: 6 billion tonnes CO<sub>2</sub> (lifetime)

# **BURRUP HUB'S** THREAT TO AIR POLLUTION



### **KEY EMISSION SOURCES**

### **SCOPE 1 (Direct)**

• Energy use; Venting; Flaring; **Fugitive emissions** 

### **SCOPE 3 (Indirect)**

• End-use combustion of exported gas

### **16000** tonnes VOCs **8000** tonnes NO<sub>2</sub> MAIN $SO_2$ POLLUTANTS

### **HEALTH IMPACTS**

#### NO<sub>2</sub>

• Pediatric asthma (4M new cases/year), lung damage.

#### SO<sub>2</sub>

↑ Cardiovascular/respiratory mortality.

### VOCs (BTEX)

• Cancer (leukemia), neurological damage.

(Source: Afifa et al., 2024; Orellano et al., 2021.)

### **CLIMATE & POLICY** CONFLICT

### **Current Targets**

Australia aims for a 26-28% reduction in emissions (below 2005 levels) by 2030.

#### **Paris Gap**

Independent analyses show this target is insufficient—needs 44-61% cuts to align with 1.5°C goals.

#### **Current Targets**

Australia aims for a 26-28% reduction in emissions (below 2005 levels) by 2030.

97 tonnes

**Others**: PM2,5; O<sub>3</sub>; Mercury



#### **Burrup Hub's Share**

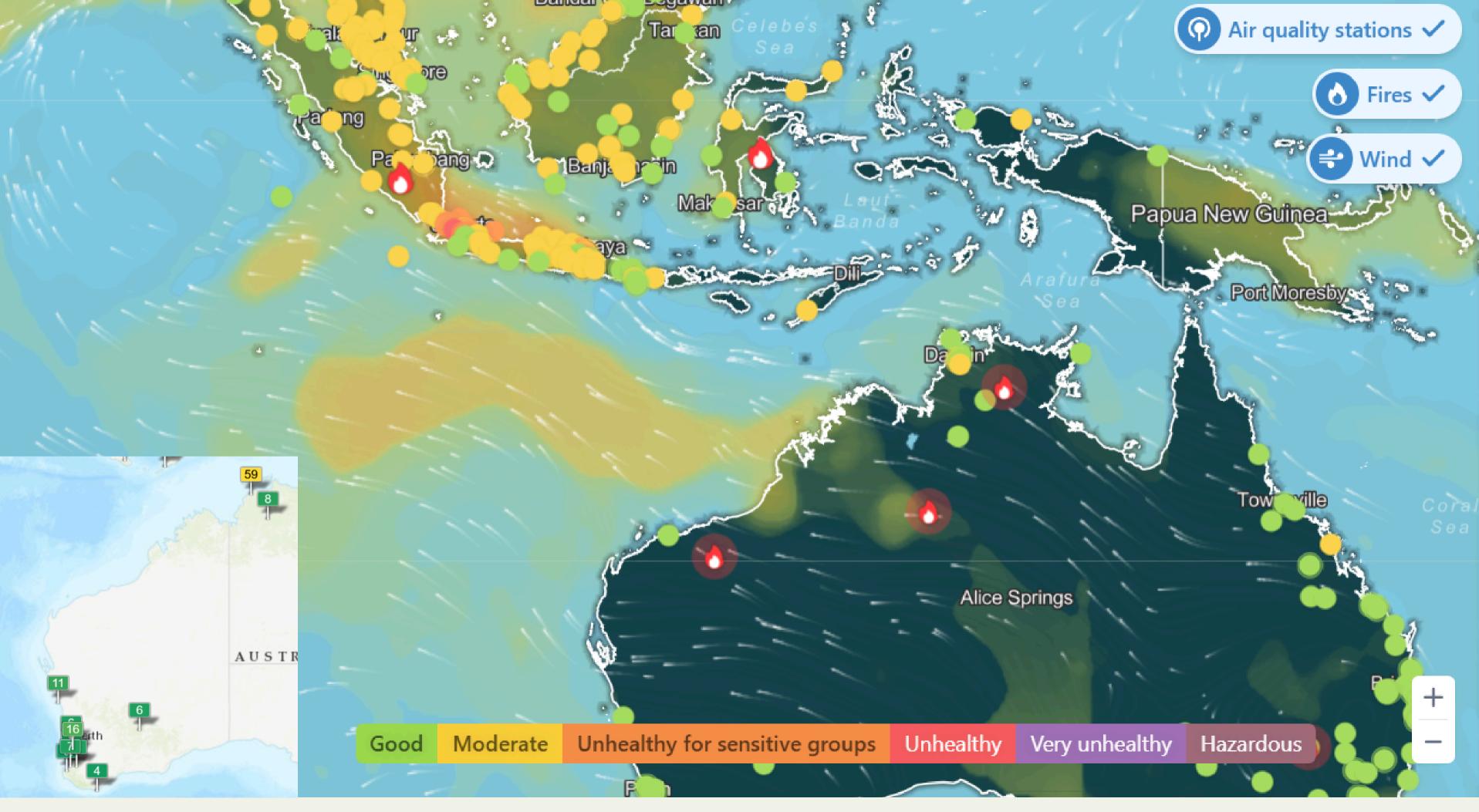
The project would consume 4.6-6.5% of Australia's 1.5°Ccompatible carbon budget.

#### **Compensation Required**

Other sectors must cut emissions by an additional 3% nationally to offset Burrup's impact.

#### Western Australia's Burden

Local industries would need a 68% reduction to meet targets if Burrup proceeds.



Source: Waqi.info

Source: IQAIR.com

### A "CREDIBLE" UNMITIGATED RISK

### Loss of control scenarios

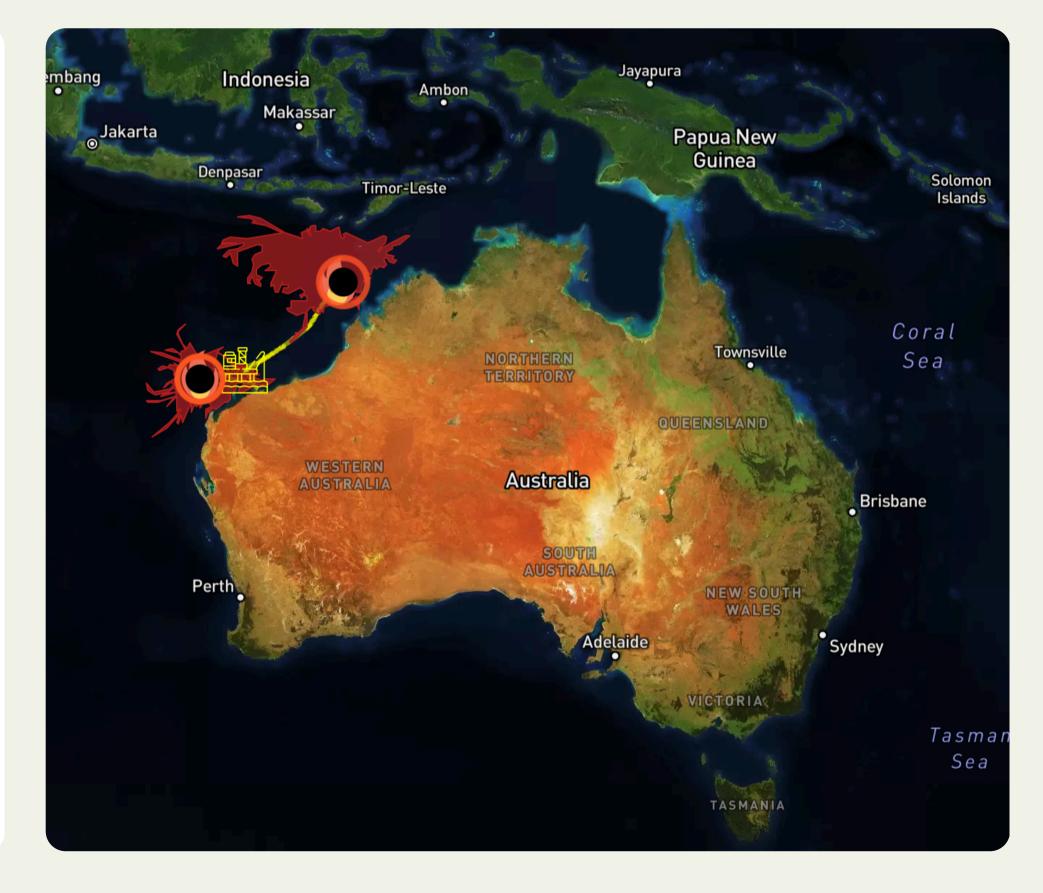
Woodside's proposal details close to a dozen loss of control scenarios entailing an unplanned release of hydrocarbons, which can occur during each part of the extraction and transportation processes.

### **Quantifying the damages**

Woodside classifies the loss of well containment as a "credible risk", a scenario that would result in over 142m liters of un-stabilized condensate being released. Models show that toxicological thresholds would be tipped as far as 870kms from the extraction site in such a scenario.

### **Poor maintenance**

Given Woodside's historical record of serious maintenance issues and accidents, and its worrying approach to decommissioning across various sites, its mitigation strategies fail to guarantee safety for all.





# BURRUP HUB ENDANGERS AQUATIC LIFE



### **Coral reef** damages

Among the species threatened by unplanned hydrocarbon releases is the hard-coral *Acropora Tenuis*, the building block for coral reefs. This species has already faced several mass bleaching events in the recent years.

### Loss of ecosystem services

Coral reefs provide shelter and nesting sites for numerous species, and reduce coastal erosion by as much as 97%. Corals also act as filters, helping maintain clear and nutrient-rich waters. The 2009 Montara field blowout caused a mass coral die-off.

### Scarborough field's dangers for turtles

Scarborough planned trunkline cuts across known nesting and foraging habitats for the endangered Flatback and Green Turtles. The dredging, soil disposal and backfill needed for the trunkline will cause sediment dispersal, leading to changes in water quality and ecotoxicity.







### Downplaying a disaster

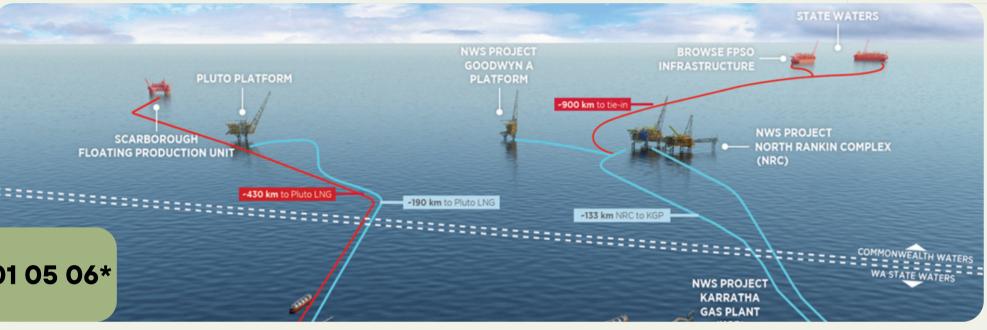
Woodside estimates that a total of 12.9 square kilometers will be disturbed during construction, but consistently downplays the impact of this disturbance on the resilience of the endangered species.

### Economic damages

The 2009 Montara blowout caused a high degree of contamination of fishing grounds, with Indonesia's fishing stocks being depleted by as much as 80% and not getting back to pre-disaster levels since.

### MANAGING **SOLID WASTE ACROSS KEY** PROJECTS





(ELW) classification - 01 05 06\*

### **WOODSIDE ENERGY**

Woodside Energy handles a wide range of waste types: drilling fluids, scrap metals, plastics, and hazardous substances.

Data 2024:

- Total waste: **13.251** tonnes
- Hazardous: **9,726** tonnes
- Non-hazardous: 3,525 tonnes
- Over 6,000 tonnes treated through evaporation

### SCARBOROUGH PROJECT

- Waste from dredging operations is managed under a dedicated Dredging and Spoil **Disposal Management Plan** (DSDMP).
- Sediments are analysed in advance through a Sampling and Analysis Plan (SAP) and disposed of at sea in approved Spoil Grounds (A/B, 2B, 5A).

### **BROWSE TO NORTH** WEST SHELF

• Drilling cuttings and fluids are recovered through a **closed**loop system and treated on the MODU. If contaminated with Non-Water-Based Fluids (NWBF), and not reusable, cuttings are considered hazardous and sent to licensed onshore facilities.

• Spent muds can only be discharged at depths >200 meters or transported offshore under the Sea Dumping Permit



### **PLUTO TRAIN 2**

- Regenerative Thermal Oxidisers (RcTOs) to treat residual waste from acid gas and nitrogen removal units.
- Additional technologies like high-efficiency turbines and waste heat recovery reduce the creation of solid waste.
- A Marine Environmental Quality Management Plan (MEQMP) is in place to monitor sediment quality and manage contaminants like heavy metals near discharge zones.

### **ECONOMIC IMPACT** GROWTH FOR SOME, BURDEN FOR MANY

### Profits are highly concentrated

Woodside and its multinational partners (Shell, BP, Chevron) stand to gain over **AU\$10.3 billion** in profits with an effective tax rate of just 4.8%.



### Costs externalised to the public

Environmental damage, public health issues, and cultural loss may cost society **AU\$17.5 billion** over the project's lifetime.

### Limited structural benefit to WA's workforce

Oil and gas sector represents **<1%** of total employment in Western Australia.



### Temporary, low-impact employment

More or less **3,200** jobs during construction, **300** ongoing mostly non-local workers.

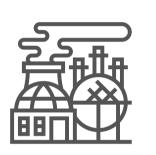
> video: Uluru rock, sacred place for Pitjantjatjara and Yankunytjatjara peoples, custodians of this territory in northern australia







### **SOCIAL IMPACT** WHO PAYS THE REAL PRICE OF THE BURRUP HUB?



### **Cultural heritage under threat**

Rock art at Murujuga is over 45,000 years old. Acid gas emissions have increased surface acidity by 1,000x, accelerating erosion.





### Health risks for vulnerable populations

Exposure to cancer. Indigenous

### **Violation of Indigenous rights**

Absence of Free, Prior and Informed Consent (FPIC) undermines trust and risks legal/reputational fallout.



Exposure to NO<sub>2</sub>, SO<sub>2</sub>, and VOCs linked to asthma, heart disease,

Indigenous communities already face high rates of chronic illness.

# CONCLUSION AND RECOMMENDATIONS

If Australia wishes to commit to its Climate Goals (i.e., meeting the Paris Agreement 1.5C scenario), it is advisable for the Burrup Hub project to **NOT be undertaken**.

However, In the case the projects gets approved

### RECOMMENDATIONS TO PRESERVE 1.5C POTENTIAL

Other sectors must cut emissions by an additional **3%** nationally to offset Burrup's impact.

Local industries would need a **68%** reduction to meet targets if Burrup proceeds.



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Woodside needs to improve its maintenance and mitigation efforts to avoid repeating past mistakes that have led to environmental disasters



### There's a caveat!

Given the impacts of the project on earth, air and water, we have to underline that even if the proper mitigation devices and processes are put in place, Burrup Hub going forward would still represent a **high environmental, social and economic cost** for many communities throughout the South Asian Pacific.

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