# Government support for hydrogen & ammonia in NSW

Ammonia Energy APAC 2023

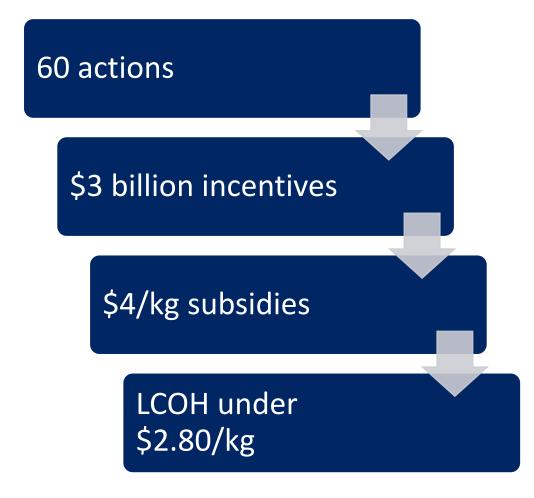
Office of Energy and Climate Change, NSW Treasury



August 2023

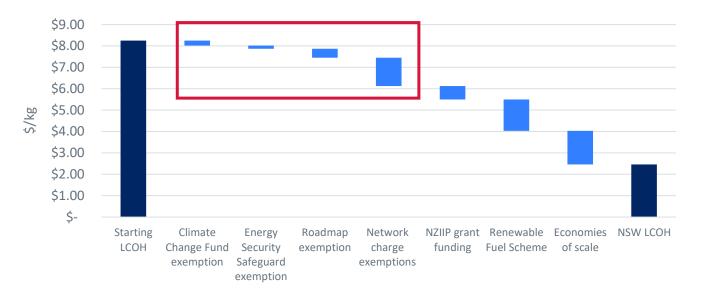
#### NSW Hydrogen Strategy – Overview





#### **Overcoming the key barrier to investment - COST**

A total of \$3 billion in incentives to reduce the cost of green hydrogen by \$4/kg.



## Electricity concessions – eligibility criteria



#### What is 'green hydrogen' for the concessions?

- You must verify under the GreenPower program, at least once every financial year, that you have surrendered an amount of renewable energy certificates equivalent to your total electricity consumption (in megawatt hours) used for hydrogen production (i.e. water processing, electrolysis).
- This does <u>not</u> require real time load profile matching or any other timebound matching of certificates.
- Green hydrogen producers exempt from GreenPower fees.

#### Future interaction with Guarantee of Origin schemes

Commonwealth Government's Hydrogen and Renewable Energy Guarantee of Origin schemes may be adopted once these are legislated.





## Electricity concessions – eligibility criteria



#### 1. Produce green hydrogen by 31 December 2030

2. Achieve peak demand of at least 1 MW

#### 3. Isolated hydrogen production load

- Dedicated connection point; or
- Metering arrangement approved by NSP

#### 4. Use of spare network capacity confirmed by NSP

- No augmentation needed; or
- You confirm you will pay for augmentation identified by NSP; or
- You will enter into load control arrangements proposed by NSP to manage network constraints

## **Electricity concessions – Application process**





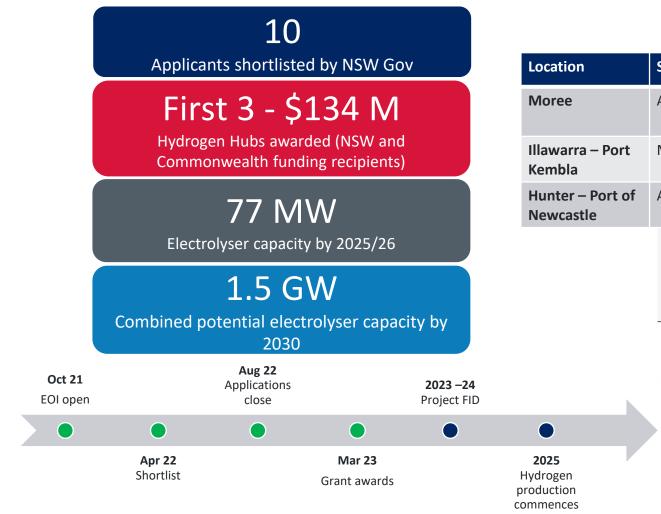
- Application (or equivalent connection studies) with NSP
- Network discount Ministerial order gazetted
- Confirmation of schemes exemption eligibility

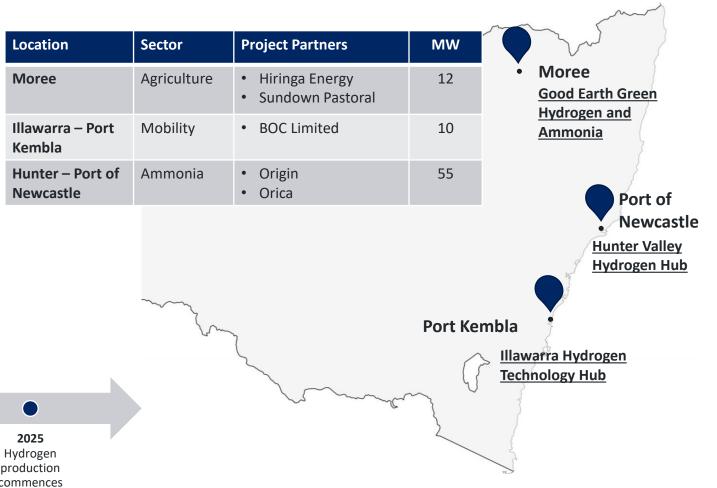
Schemes exemption Ministerial order gazetted

Blue text applies to both scheme exemptions and network charge discounts

### NSW and Commonwealth Hydrogen Hub Initiatives







#### Action 21 – Hydrogen Planning Guideline



Department of Planning and Environment dpie.nsw.gov.au



#### Hydrogen Guideline

A guide to the NSW planning system March 2023



Guidance on how the NSW planning system can facilitate development of a hydrogen economy

The Guideline helps industry and regulators identify:

- How hydrogen development could be characterised
- Whether a proposed development is permissible
- What planning pathways are available

It will be updated as the planning framework is amended to support safe and efficient hydrogen development, and industry matures.

Accessible at planning.nsw.gov.au

### Action 43 – Green Ammonia Market Study



In partnership with industry, NSW Government will conduct an ammonia market study to support government and private sector investment decisions.

- Bottom up cost analysis
- Primary research on willingness to pay
- Comparison of global competitors
- Review of policy measures to support investment





#### Action 1 - Hydrogen Infrastructure Masterplan



Scaling our energy system to manage GW scale green hydrogen production

- Determining optimal supply chain and infrastructure configurations to meet hydrogen demand growth
- Guidance to NSW government and industry on planning and investment decisions
- Building on National Hydrogen Infrastructure Assessment





Production

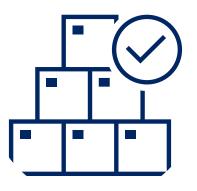
Storage



Distribution

## Key takeaways for hydrogen in NSW





# Strategy implementation

Actions providing tangible support to industry well advanced



# Studies underway to support further policy

Infrastructure Masterplan and Ammonia Market study due this year



## ~\$2/kilo incentive

Electricity cost concessions are now available to hydrogen producers



#### **Hubs approaching FID**

\$134 million in grant funding awarded, hubs expected to be operational by 2025/26



# Questions and contact

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https://www.energy.nsw.gov.au/business-and-industry/ways-get-started/hydrogen-nsw

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