Australian Government
Department of the Environment and Energy

Safeguard Mechanism

Prescribed production variables and default emissions intensity values

Outline

National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Prescribed Production Variables) Rule 2020

- The Department of the Environment and Energy has opened public consultation on proposed changes to the Safeguard Mechanism legislation
  - Consultation package
  - Policy background
  - Process followed
  - List of prescribed production variables
  - Next steps

Consultation package

Documents for consultation:

1. Exposure draft: *National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Prescribed Production Variables) Rule 2020*
2. Safeguard Mechanism: Prescribed production variables and default emissions intensities
3. Explanatory document

Legislative framework

Clean Energy Regulator Act 2011

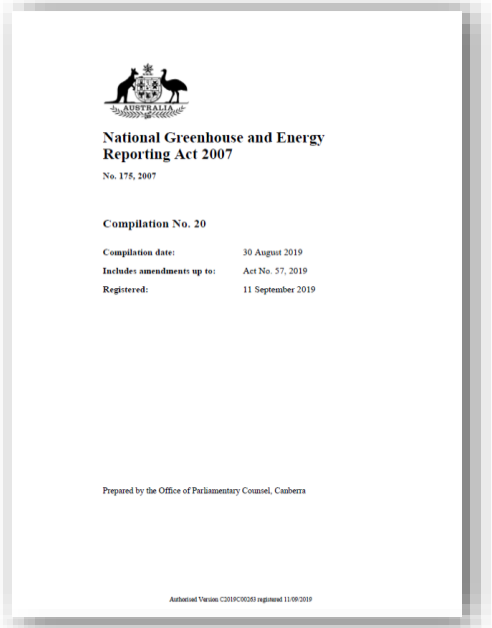
The Clean Energy Regulator administers the *National Greenhouse and Energy Reporting Act 2007,* including the Safeguard Mechanism.

National Greenhouse and Energy Reporting Act 2007

A single national framework for reporting and disseminating company information about greenhouse gas emissions, energy production, energy consumption and other information.

National Greenhouse an Energy Reporting (Safeguard Mechanism) Rule 2015

The Safeguard Mechanism places a legislated obligation on Australia's largest greenhouse gas emitters to keep net emissions below their emissions limit (baseline).



National Greenhouse and Energy Reporting Act 2007

No. 175, 2007

Compilation No. 20

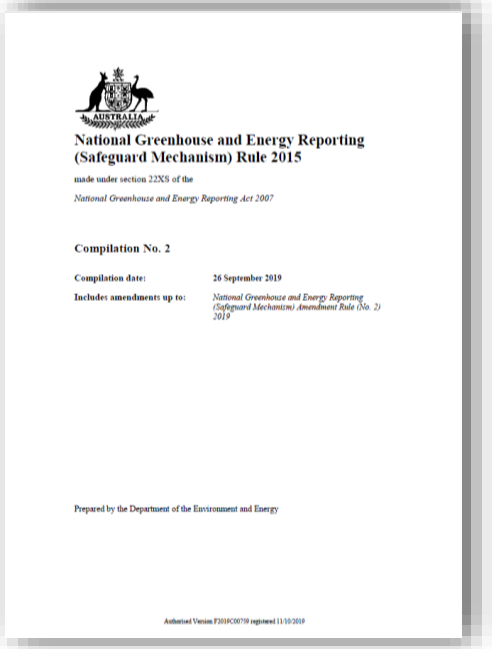
Compilation date: 30 August 2019

Includes amendments up to: Act No. 57, 2019

Registered: 11 September 2019

Prepared by the Office of Parliamentary Counsel, Canberra

Authorised Version C2019C00263 registered 11/09/2019



National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015

made under section 22XS of the

National Greenhouse and Energy Reporting Act 2007

Compilation No. 2

Compilation date: 26 September 2019

Includes amendments up to: *National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment Rule (No. 2) 2019*

Prepared by the Department of the Environment and Energy

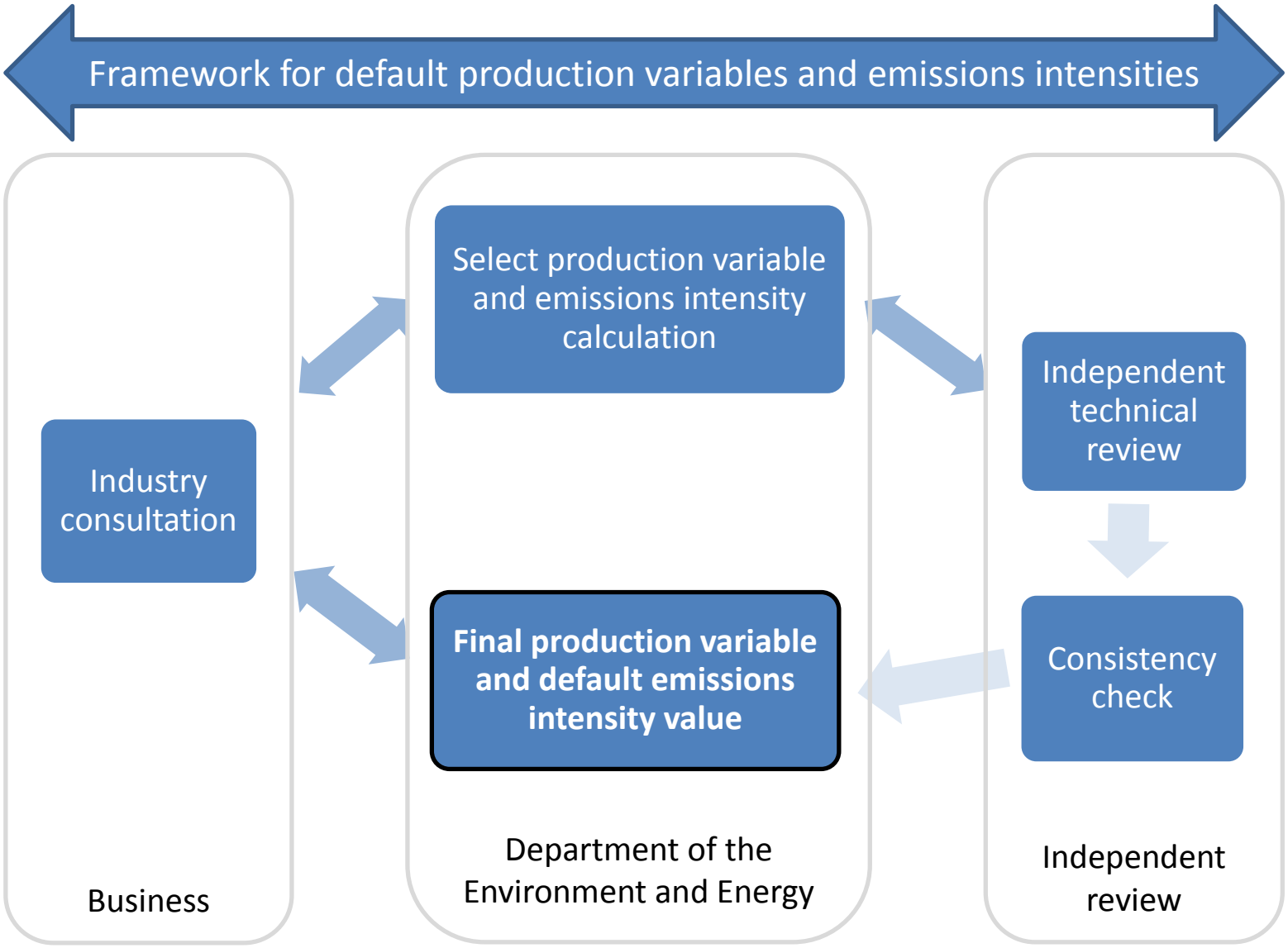
Authorised Version F2019C00710 registered 11/10/2019

Policy background

Making the Safeguard Mechanism simpler and fairer

- Safeguard Mechanism commenced 1 July 2016
- Reviewed as part of the Government's 2017 review of climate change policies
- Amended in March 2019:
    1. Bring baselines up-to-date
    2. Introduce Government-determined prescribed 'production variables' and associated default emissions-intensity values
    3. Allow baselines to adjust annually with production so they reflect business growth

Development and consultation steps



Framework for default production variables and emissions intensities

Principles for selecting default production variables

1. **Effective -** provide a suitable basis for setting baselines that reflect emissions per unit of production.
2. **Consistent -** treat facilities and industries consistently. Provide a suitable reference point that is representative of a sectoral average.
3. **Practical -** be as simple and low cost as possible, avoiding excessive measurement and reporting requirements and building on existing schemes, where possible.
4. **Robust -** be based on high quality data and robust methodology that protects the confidentiality of sensitive industry data.

Scheduling of production variables

- Ideally, production variables are an output.
- Output-based production variables are suitable for annual adjustment.
- As not all production variables are suitable for annual adjustment with production:
  - Schedule 2 is for *prescribed (annually adjusted) production variables*
  - Schedule 3 is for *prescribed (fixed) production variables*

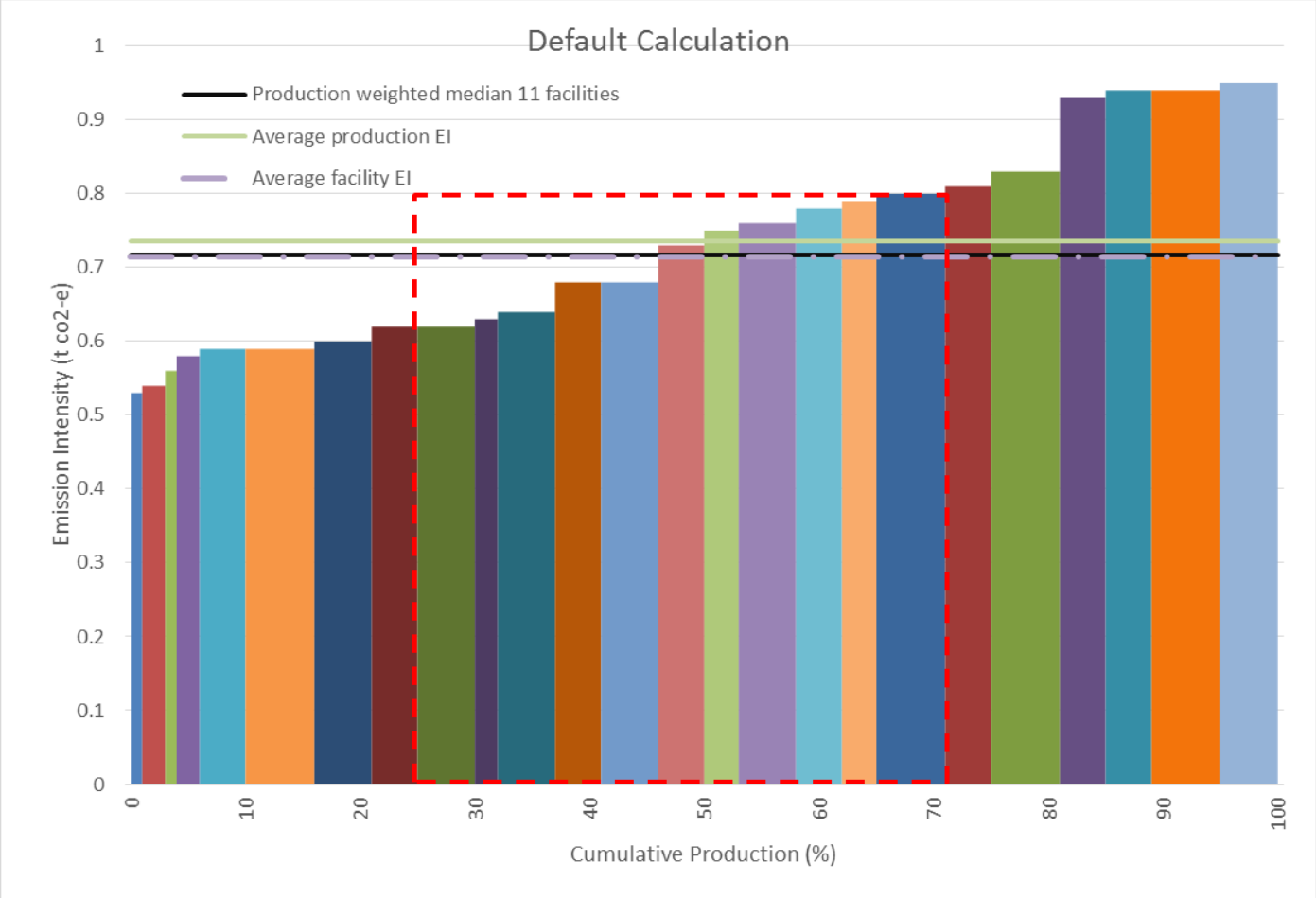
Framework for default production variables and emissions intensities

Default emissions intensity calculation method

- Calculate the emissions intensity of production for each relevant facility for the five years from 2012-13 to 2016-17 (that is, five data points per facility), in so far as this is feasible and data is of a sufficient quality.
- Rank the data by emissions-intensity (including up to five data points for each facility).
- Determine the production-weighted, average emissions-intensity of around half the emissions intensity values, centred on the median production unit, and targeting around half the production volume.

Framework for default production variables and emissions intensities

Default emissions intensity calculation method



Prescribed production variables (Tranche 1)

Manufacturing (other than steel)

Coal mining

Iron ore mining

Other mining

Oil and gas

Steel manufacturing

Rail transport

Air transport

Mixed passenger and freight water transport

Wastewater

Electricity

Petroleum refining

Manufacturing

Bulk flat glass

Glass containers

Aluminium

Alumina

Ammonia

Ammonium nitrate

Urea

Ammonium phosphates

Sodium cyanide

Synthetic rutile

White titanium dioxide pigment

Mining

Coal mining

- Run of mine coal
- Coal mine waste gas
- Fugitive emissions at a decommissioned coal mine

Iron ore mining

- Iron ore

Other mining

- Manganese ore
- Bauxite
- Heavy metal concentrate
- Run of mine metal ore

Oil and Gas

Extracted oil and gas hydrocarbon

Stabilised crude oil or condensate (stabilisation only)

Stabilised crude oil or condensate (extraction and stabilisation)

Processed natural gas (processing only)

Processed natural gas (production and processing)

Liquefied natural gas (from unprocessed natural gas)

Liquefied natural gas (from processed natural gas)

Ethane

Liquefied petroleum gas

Reservoir carbon dioxide

Primary steel manufacturing

Coke oven coke (integrated iron and steel manufacturing)

Lime (integrated iron and steel manufacturing)

Iron ore sinter (integrated iron and steel manufacturing)

Iron ore pellets (integrated iron and steel manufacturing)

Iron ore pellets (not from integrated iron and steel manufacturing)

Continuously cast carbon steel products and ingots of carbon steel (integrated iron and steel manufacturing)

Continuously cast carbon steel products and ingots of carbon steel (manufacture of carbon steel products from cold ferrous feed)

Hot-rolled long products

Hot-rolled flat products

Transport

Rail transport

Net-tonne-kilometres of bulk freight on a dedicated line

Net-tonne-kilometres of bulk freight on a non dedicated line

Net-tonne-kilometres of non-bulk freight

Passenger-kilometres of rail passenger transport

Air transport

Revenue-tonne-kilometres of air transport

Passenger road transport

Vehicle-kilometres of passenger road transport

Mixed passenger and freight water transport

Deadweight-tonne-kilometres of mixed passenger and freight water transport

Other production variables

Wastewater handling
(domestic and commercial)

Electricity generation

Petroleum refining
(in Schedule 3)

Other amendments

- **Section 6 – guidance on estimate (site-specific) emissions intensity calculations**
  - Prevent double counting of emissions where a facility uses a combination of default and estimated (site-specific) values.
- **Section 25 – inherent emissions variability criteria**
  - Ensure that applying for a transitional calculated baseline will not affect future eligibility under the inherent emission variability criteria.

Definitions, inclusions, and exclusions

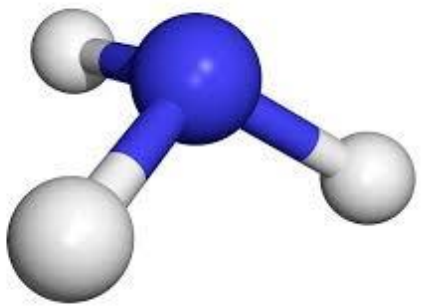
Production variable definition

- Includes definition of production variable
- Specified default emissions intensity
- Included in Safeguard Rule

Inclusions and exclusions

- Helps facilities to determine what production variables to use
- Helps facilities allocate their emissions to production variables
- Included in explanatory material

Worked example

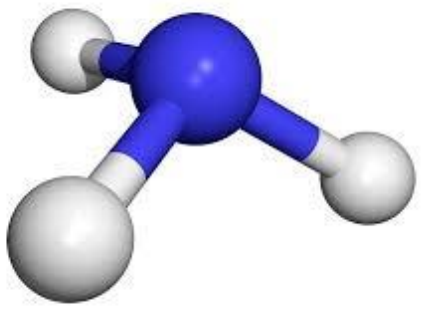


Chemicals facility

Consider a facility that produces ammonia and other chemicals

- Responsible emitter uses production variable definition to confirm that ammonia is a production variable
- Default emissions intensity is 1.87 t CO_2-e per tonne of 100% equivalent anhydrous ammonia
- Responsible emitter produces 50,000 tonnes of '*100% equivalent anhydrous ammonia (NH_3) contained within anhydrous ammonia that: has a concentration of ammonia equal to or greater than 98%; and is produced as part of carrying on the ammonia production activity at the facility; and is of saleable quality*' (from definition).
- If facility uses default emissions intensity, it will receive baseline allocation of 93,500 tonnes (93,500 = 1.87 × 50,000) for its ammonia

Worked example

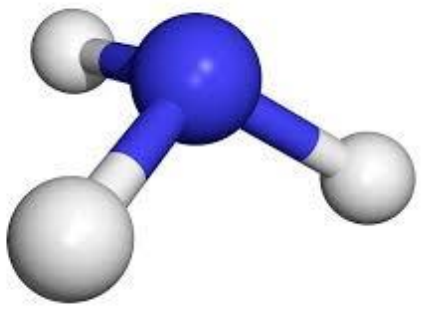


Chemicals facility

Consider a facility that produces ammonia and other chemicals

- Suppose that the facility uses the ammonia to produce nitric acid, and then reacts ammonia with nitric acid to make ammonium nitrate
- Inclusions and production variable definition for ammonium nitrate specify that nitric acid production is part of the ammonium nitrate production activity
- The facility would get an additional baseline allocation based on the tonnes of 100% equivalent ammonium nitrate it produces
- The facility would not get an additional baseline allocation based on the amount of nitric acid produced, because nitric acid production is part of the ammonium nitrate production activity

Worked example



Chemicals facility

Consider a facility that produces ammonia and other chemicals

- For each production variable, default emission intensities are optional during the transition period
- If a facility wishes to use a site-specific emissions intensity, they can use the documented inclusions and exclusions to understand which emissions can be included in the estimated emissions intensity calculation

Next steps

- Access the consultation package from the Department's website
- Please submit comments to

  Safeguard.Mechanism@environment.gov.au

  - Option to mark as confidential
- The Department will continue to work with businesses to develop remaining default values by mid 2020.

Questions?

- Please submit questions using the Safeguard Mechanism email address until the end of the consultation period:

  Safeguard.Mechanism@environment.gov.au

- If there are many questions on common themes, we will compile and publish them on the Department's website