FACTSHEET:
HE WAKA EKE NOA: CARBON PRICING OPTIONS

AMURI IRRIGATION CO

He Waka Eke Noa, the Primary Industry Climate Action partnership investigating ways reduce New Zealand's agricultural emissions, has released a proposal regarding carbon pricing options. Pricing agricultural emissions is a priority for the New Zealand Government and agriculture is currently the only sector not contained in NZ's Emissions Trading Scheme (ETS). It is proposed that pricing of emissions would be implemented from 2025.

OPTION 1 - THE ETS FRAMEWORK

- Emissions are calculated and reported at the processing level (meat, milk and fertiliser plants) through product received from or sold to farms.
- Initially 5% of the emissions would be priced and with 95% free allocation expected to reduce annually by 1 percentage.
- All gases are included and treated the same. Nitrous oxide (N_2O) and methane (CH_4) are rated as Co_2e (Carbon Dioxide equivalents).
- Only carbon sequestration (carbon removals from vegetation) is eligible to offset emissions.
- Reasonably cost-effective administration system ($8 million/pa to processors for reporting and $2 million/pa for operational costs). Processors are likely to pass on costs to farms.
- ETS does not drive behaviour change, or recognise farms implementing efficiencies or taking early action to reduce emissions programmes within government.
- Revenue raised is invested back into the agricultural sector to support emission reductions. The industry would not directly contribute to this and there is potential it fuels other works programmes within government.

OPTION 2 - FARM LEVEL LEVY

- Emissions are calculated using farm specific data. The farm then pays for net emissions.
- There are incentives and rewards for on-farm sequestration, which can offset the emission levy.
- The pricing system uses either simple or detailed calculations of on-farm data (detailed is similar to Overseer). Metrics: farm size, stock numbers, production per stock class, land use classification and annual nitrogen use.

A	+	B	−	C	=	$
A is the cost that each farm faces for their short-lived gas emissions. A is determined by ■ The weight of CH_4 calculated (kg) ■ The price for CH_4 ($/kg)		B is the cost that each farm faces for their long-lived gas emissions (N_2O from live-stock and synthetic fertiliser, CO_2 from urea) B is determined by ■ The weight of long-lived gases calulated (kg CO_2e) ■ The price of long-lived gases ($/kg CO_2e)		C is the value that each farm is rewarded for the on-farm sequestration C is determined by ■ Areas of eligible vegetation ■ The relevant sequestration rate/s in weight of long-lived gases (kg CO_2e) ■ The price of long-lived gases ($/kg CO_2e)		These costs/values total to a 'net' emissions return, where A, B and C are all netted off as dollar values, not as gases through a carbon equivalency metric.

How Net Cost to a farm would be calculated under a Farm Level Levy

- Farms register in the farm-level pricing system if they are GST registered and annually averaged over 550 SU (50 dairy cattle, 700 swine, 50,000 poultry) or apply 40T synthetic nitrogen fertiliser. This would capture around 96% of all agricultural GHG emissions and equate to around 23,000 farms.

Sector	Costs (2025)
Dairy	$0.04-$0.05 Kg/MS
Sheep, Beef and Deer	$0.09-$0.19 Kg Sheep $0.06-$0.29 Kg Beef $0.21 Kg Deer
Fertiliser	$0.02-$0.05 kg N

Indicative Production Charges under a Farm Level Levy

- Significant administration costs estimated to be around $113 million/pa ($63 million cost to farms for reporting and $50 million/pa operating costs). The landowner is responsible for reporting and paying for emissions but this can be formally delegated.
- Rebates are paid through a land-based option or an output-based option.
- The land-based option is tied to the 'carrying capacity' of the land and calculated on an average adjustment which accounts for improvements. This would likely restrict those who have developed and intensified their capacity. Currently there is no accepted method for determining the carrying capacity at a national level, so there is more work to be done before this option can be progressed.
- The output-based option relates to livestock emissions not fertiliser inputs. A rebate would be based on a nationally agreed 'average efficiency' per unit of output metric. This rewards farms who are efficient in growing and finishing stock and the total production and throughput of the farm system. The challenge with an output-based system is there are a number of farms who trade stock but do not hold the final output. A system would be required to pass this through the supply chain.
- Management and administration for this option is complex, especially if breeding or capital stock are kept on-farm for many years. It would need to link back to the initial breeder and ensure they are still in operation (e.g., 5+ years).
- Any revenue generated invested back into the research and development to help reduce emissions, incentives to adopt new and emerging technology or on-farm actions that reduce emissions.

He Waka Eke Noa is looking to reward further sequestration opportunities on-farm. These are indicative rates for the vegetation type:

Vegetation Type	Rate (2025)
Indigenous vegetation established before 1 January 2008, actively managed	$156 per hectare
Indigenous vegetation established on or after 1 January 2008	$552 per hectare
Riparian vegetation	$238 per hectare

OPTION 3 - PROCESSOR LEVEL HYBRID LEVY

- Emissions are calculated at the processor level (meat, milk or fertiliser), based on product received from farm or sold to farm.
- Administration costs are likely less than farm-level levy. The processor is likely to pass the costs back to the supplier/purchaser (farmer).
- Enables a split gas approach which means that different levy rates would apply to short- and long-lived gases.
- Any revenue raised through the levy would be invested back into the agricultural sector.
- Seen as an intermediary step in moving toward farm-level pricing in time.
- Emissions are calculated on national average emissions for product streams. No rebates are available under this scheme unless you have an Emissions Management Contract (EMC).
- Farms could enter an EMC to receive payment for reducing emissions or recognition sequestration on-farm.
- The requirements and management of an EMC is being developed. It may be like the Farm Environmental Plan programme, i.e., identifying the risks and outlining actions or improvements you would undertake to adopt Good Management Practice.

Read the detailed report: https://hewakaekenoa.nz/wp-content/uploads/2021/11/He-Waka-Eke-Noa-Draft-Engagement-Document-November-December-2021.pdf