

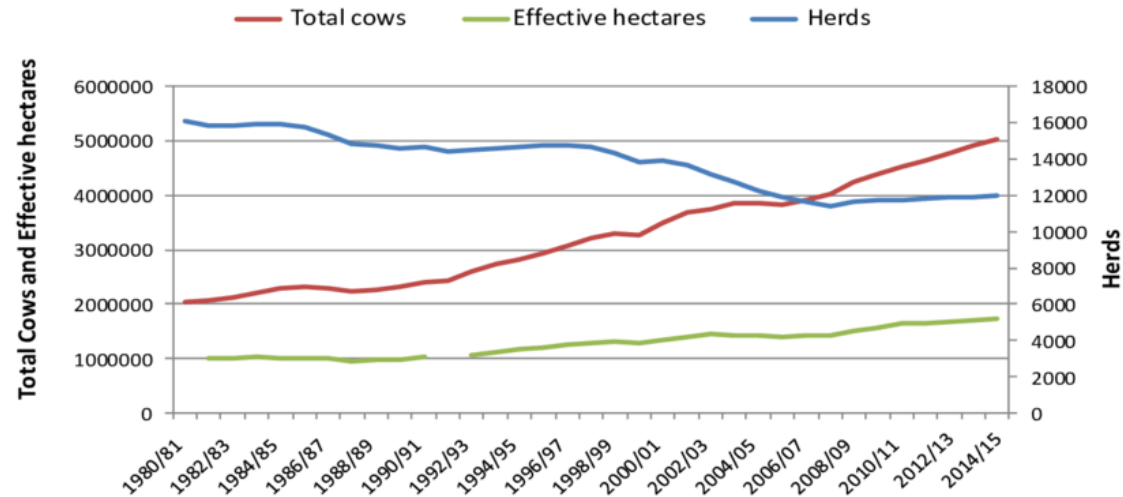


28 July 2023

# Farming under the spotlight – lessons from NZ

Blake Holgate  
Rabobank NZ

# A short history of NZ's environmental regulatory history



NEW ZEALAND / ENVIRONMENT

## Water pollution now public's top concern

6:37 pm on 2 January 2019

Share this     

A new poll has found freshwater pollution is now worrying New Zealanders more than any other topic.



# Progressively tighter regulation's through 2010's

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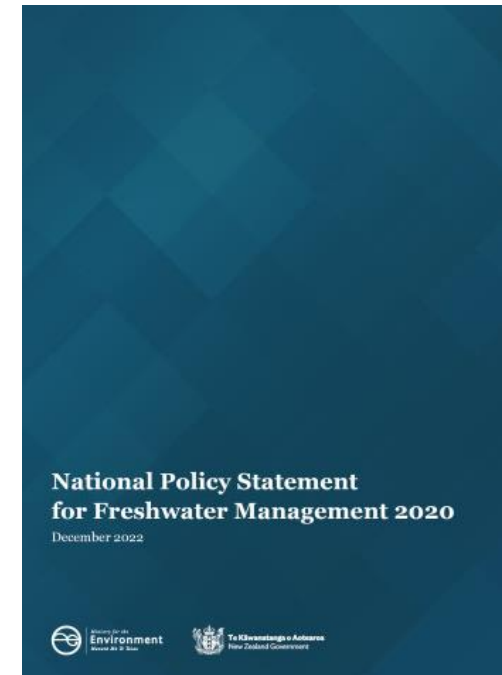
2011



2014



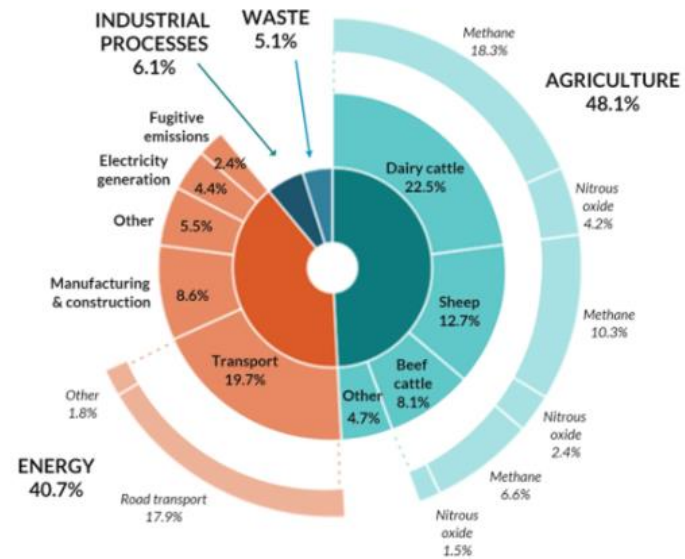
2020



# Focus shifts to GHG emissions post Paris Agreement

## NEW ZEALAND'S Greenhouse Gas Emissions

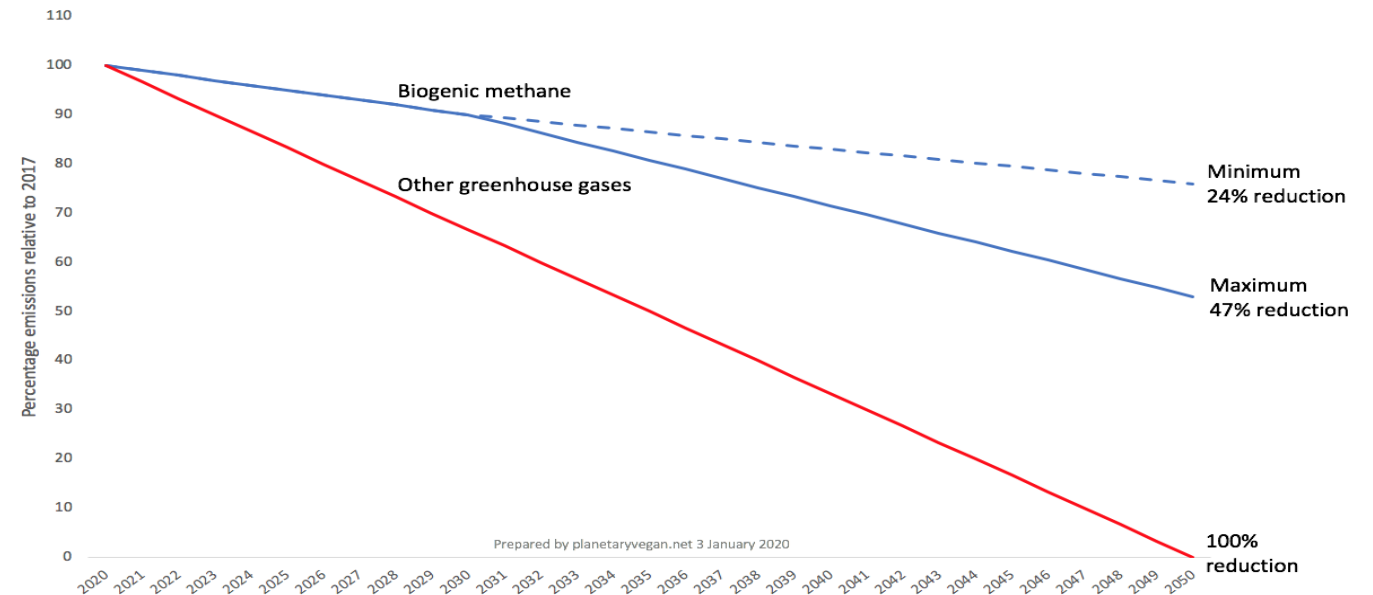
Source: New Zealand's Greenhouse Gas Inventory 1990-2017, published April 2019



Note: Percentages in the graph may not add up to 100 due to rounding.

Fugitive emissions are from the leakage, burning and controlled release of gases in oil and gas operations as well as escaping gases from coal mining and geothermal operations. Agricultural methane is mainly from livestock digestive systems and nitrous oxide is mainly from manure on soil.

Ministry for the Environment, CC BY-ND

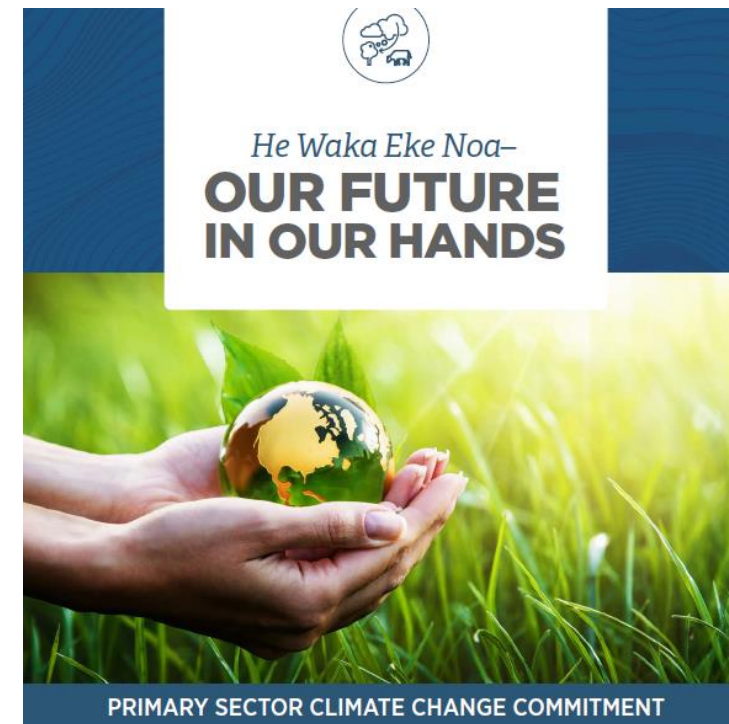


Prepared by planetaryvegan.net 3 January 2020

# Collaboration between industry & government

“He Waka Eke Noa” – Our Future in Our Hands

*“The primary sector will work in good faith with government and iwi/Maori to design a practical and cost-effective system for reducing emissions at farm level by 2025”*



# Key milestones/issues to resolve by 2025

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## Milestones

### Late 2020/21

- Information on how to measure and manage GHG emissions

### 2022

- 100% Farmers know individual emissions profile
- Government reviews progress

### 2024

- Emissions reporting & benchmarking system completed

### 2025

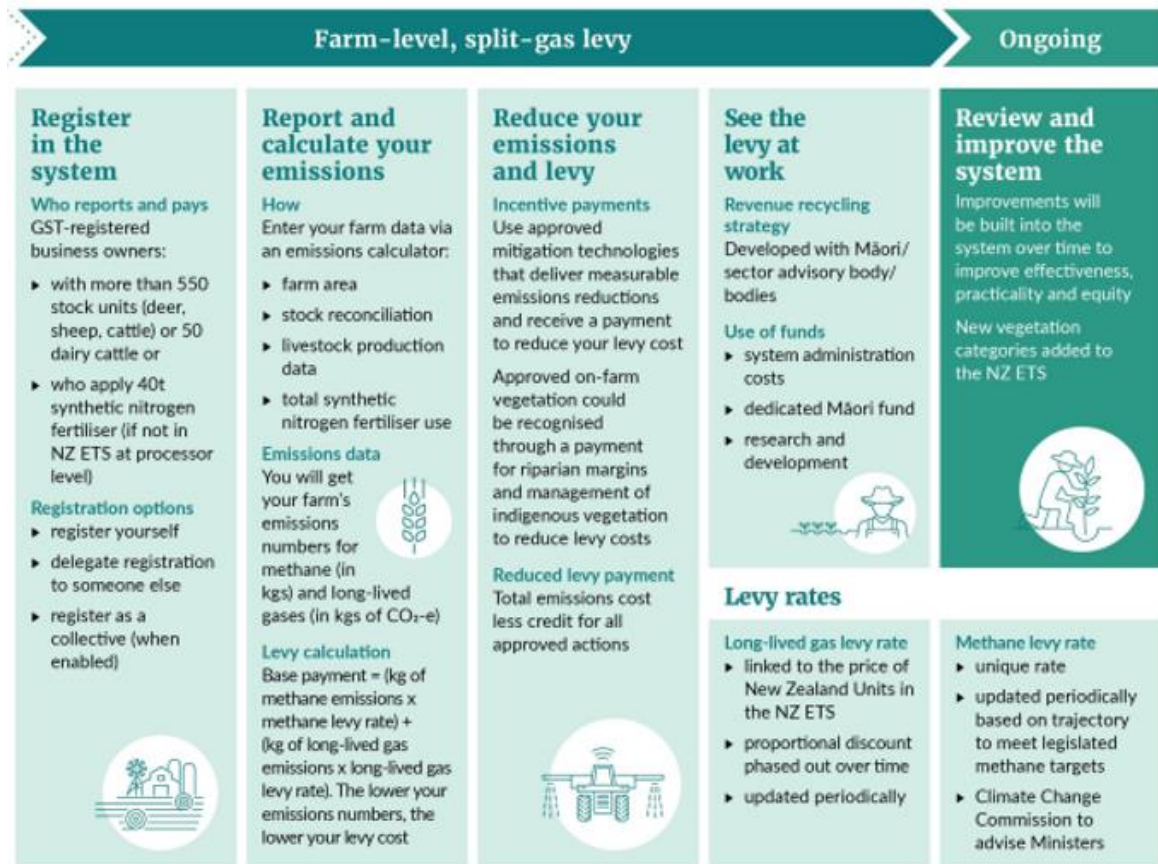
- Reporting and paying for individual emissions
- Environmental plan to deal with emissions

## Key issues to be decided

- How emissions measured/modelled (including incorporating new technologies)
- Offsets
- Extension programme
- **Pricing mechanism**



# Price on (methane + long-lived gas) – (sequestration + removal activities)



Farm Type	Key farm information (kgMS, total stock units, kgN/ha) <sup>30</sup>	Prices: A=\$0.17/kg; B=\$13.80/t; C=\$104/t (75% of NZ ETS carbon price) <sup>31</sup>				
		Levy cost (A+B)	Action-based Incentive	Sequestration reward	Total levy cost less Incentive discount and sequestration reward	EFS % Impact
North Island hill country	4,841 (su)	\$14,045	\$3,363	\$4,782	\$5,900	-2.9%
North Island intensive	2,745 (su)	\$9,814	\$2,347	\$3,150	\$4,317	-3.0%
South Island hill country	9,751 (su)	\$21,914	\$5,250	\$6,365	\$10,299	-5.5%
South Island deer	7,037 (su)	\$21,395	\$5,120	\$6,365	\$9,910	-4.3%
South Island mixed cropping	2,850 (su), 215 (kgN/ha)	\$7,864	\$2,158	\$1,224	\$4,482	-1.4%
Māori agribusiness sheep and beef range <sup>32</sup>	3,733 – 7,843 (su)	\$24,993 to \$43,685	\$5,994 to \$10,612	\$10,228 to \$75,970	-\$42,897 to \$8,771	-2.6% to 5.9%
Canterbury dairy	349,135 (kgMS)	\$26,414	\$13,815	\$1,406	\$11,193	-1.1%
Taranaki dairy	118,296 (kgMS)	\$9,985	\$5,162	\$1,130	\$3,693	-1.1%

But its not all about what is happening within our shores...

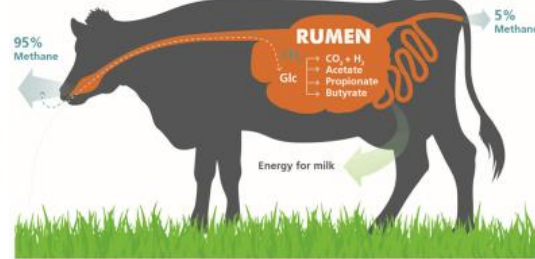
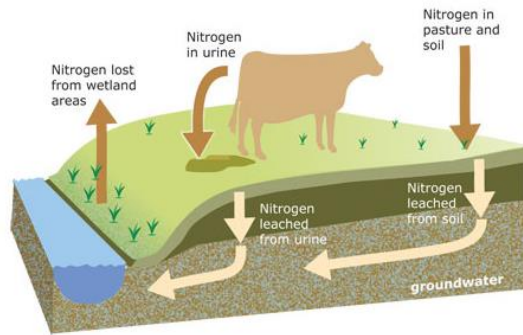


What do the world's top 10 food companies want? (\$US1.185 Trillion of market cap).

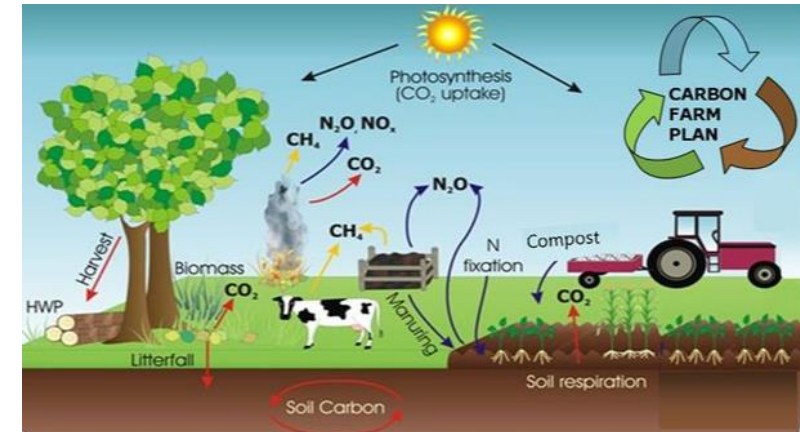


Details uncertain, but direction of travel clear – increasingly land-owners required to account for (& be rewarded for) greater range of environmental impacts

### Negative effects



### Positive effects



# Environment – new driver of land-use/systems & innovation

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## Land-use/farm system change



## Environmentally efficient innovation



**SPOTLIGHT**



**DSM announces collaboration on developing methane inhibitor for New Zealand cows**



# Creating both risks and opportunities

**CHALLENGE:** Risks are here and now – benefits largely in the future

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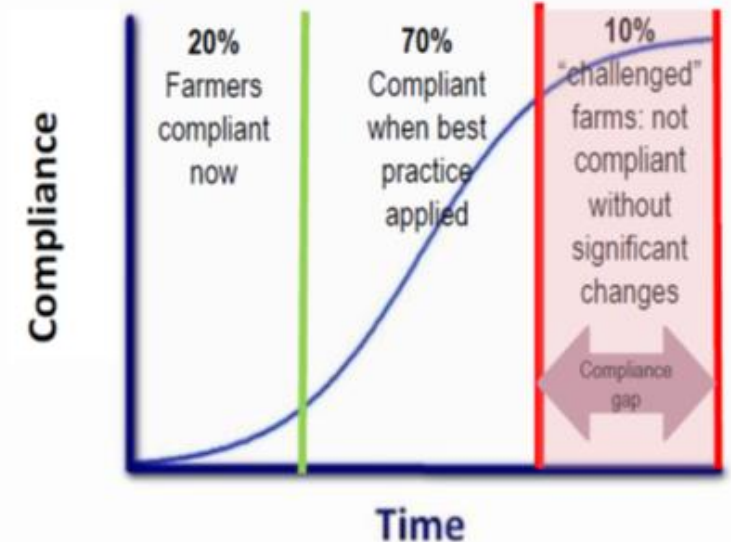


# But not everyone impacted in the same way...

Defined by regulatory framework combined with individual farming circumstances



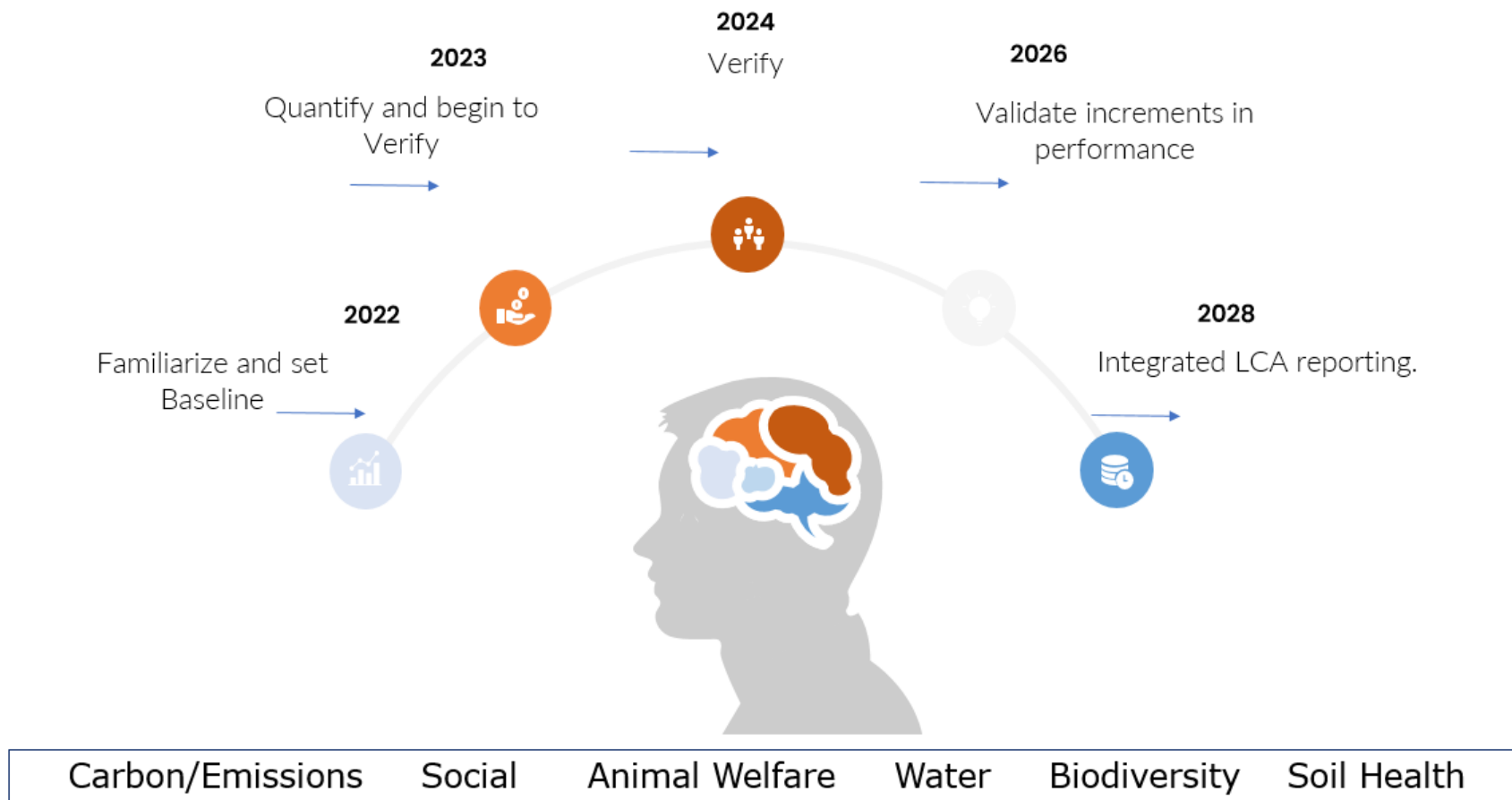
- **Land-use intensity**
- **Natural characteristics of the land**
- **Receiving environment**



Source: Roger MacGibbon

# Its not just what is happening on the land that is changing – Non-financial reporting future for farmers

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# Top three take home messages

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1. Set/define the narrative, don't be defined/responding to it
2. Separate the noise from your reality – understand your own farm-specific risks/opportunities (and focus on what can control)
3. Think strategically, not just tactically, about sustainability



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