




Increased Energy Efficiency **Reducing Carbon Emissions**


BC Energy Step Code and Zero Carbon Step Code Implementation


2023-JUL-26

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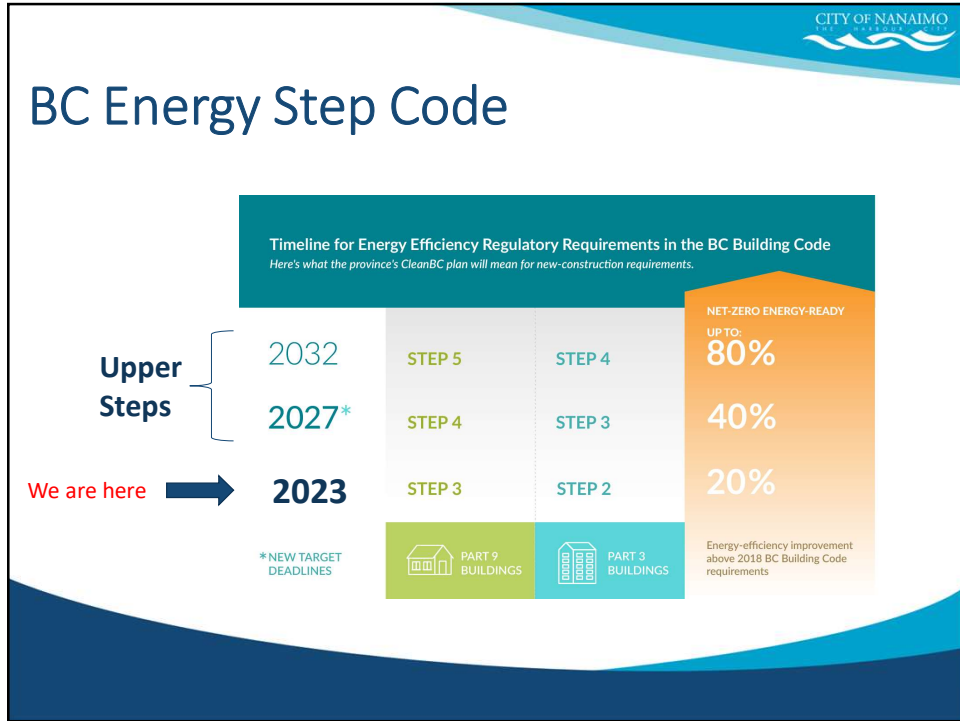


Increased Energy Efficiency **Reducing Carbon Emissions**

 A 20% increase in energy efficiency above the 2018 Building Code

 Voluntary carbon limits for Part 3 and Part 9 construction

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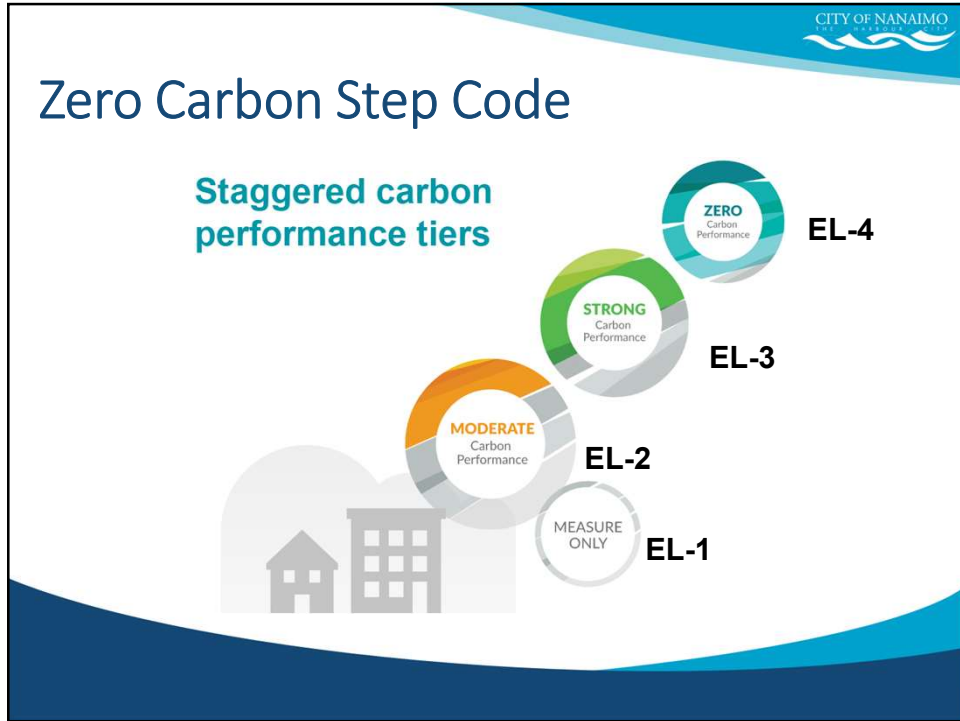
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Nanaimo's Implementation Dates

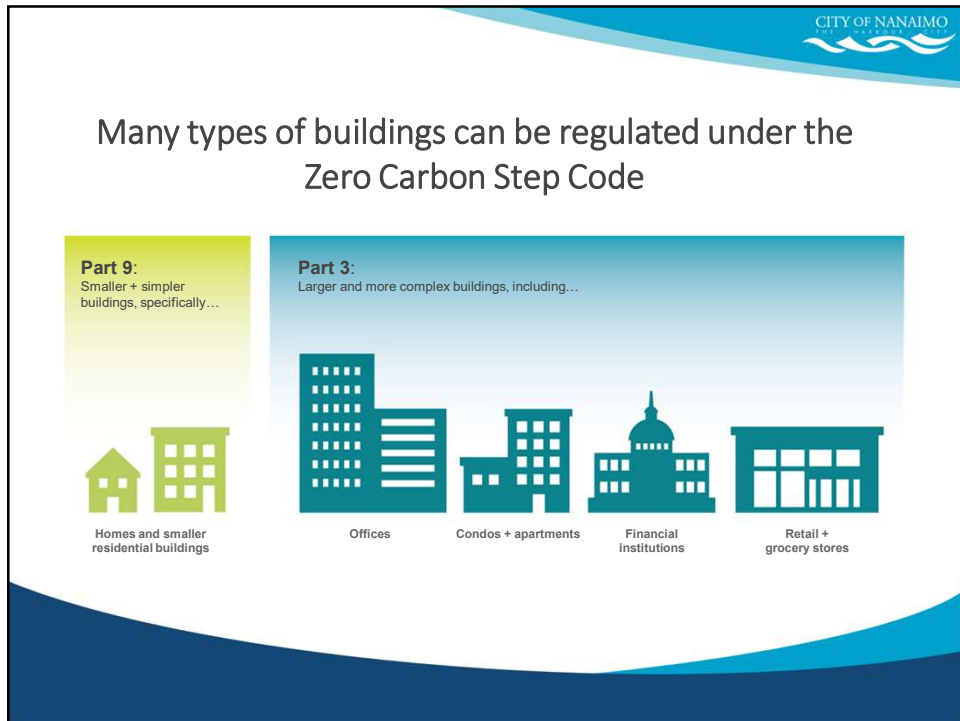
Effective Date	Building Types	BC Energy Step
2020-APR-21	Part 3 and Part 9	Step 1
2021-JAN-01	Part 9	Step 2
2022-JAN-01	Part 3	Step 2
2022-JAN-01	Part 9	Step 3

We are here

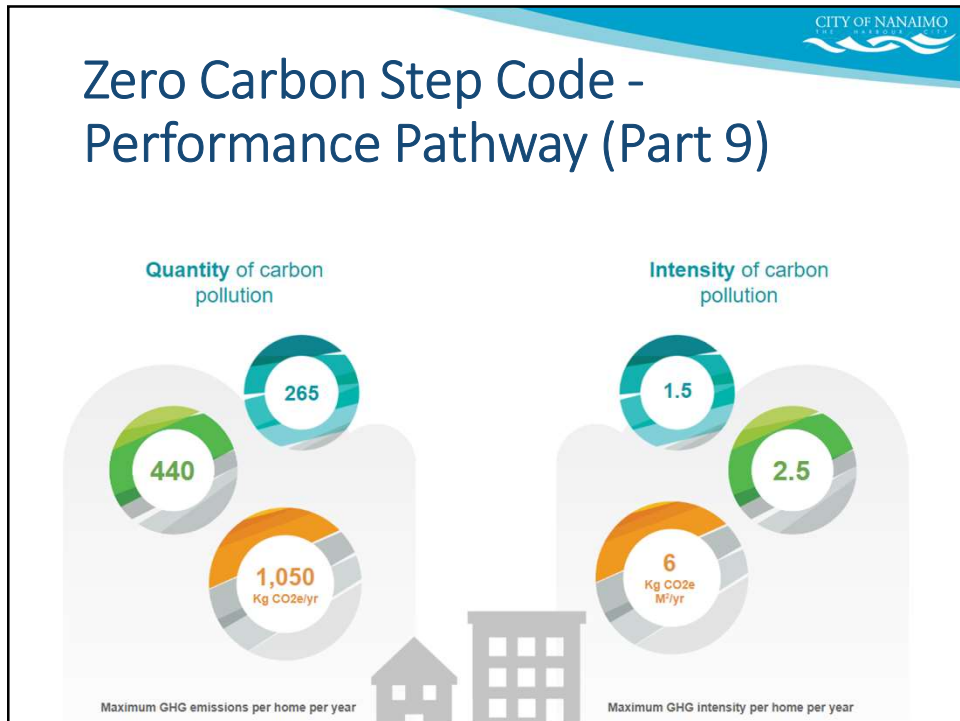
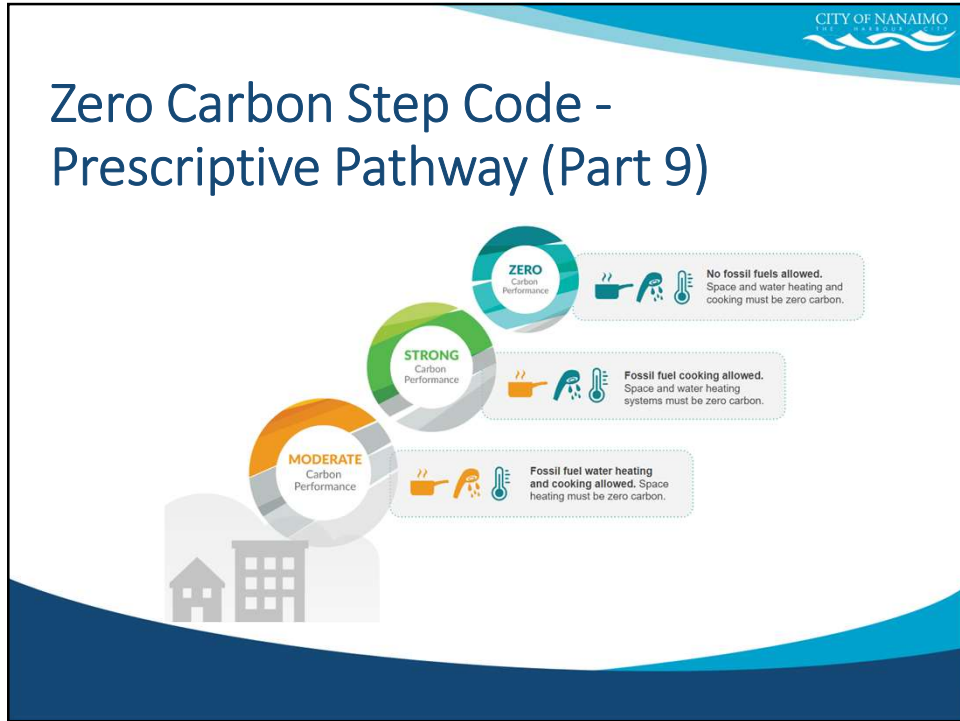
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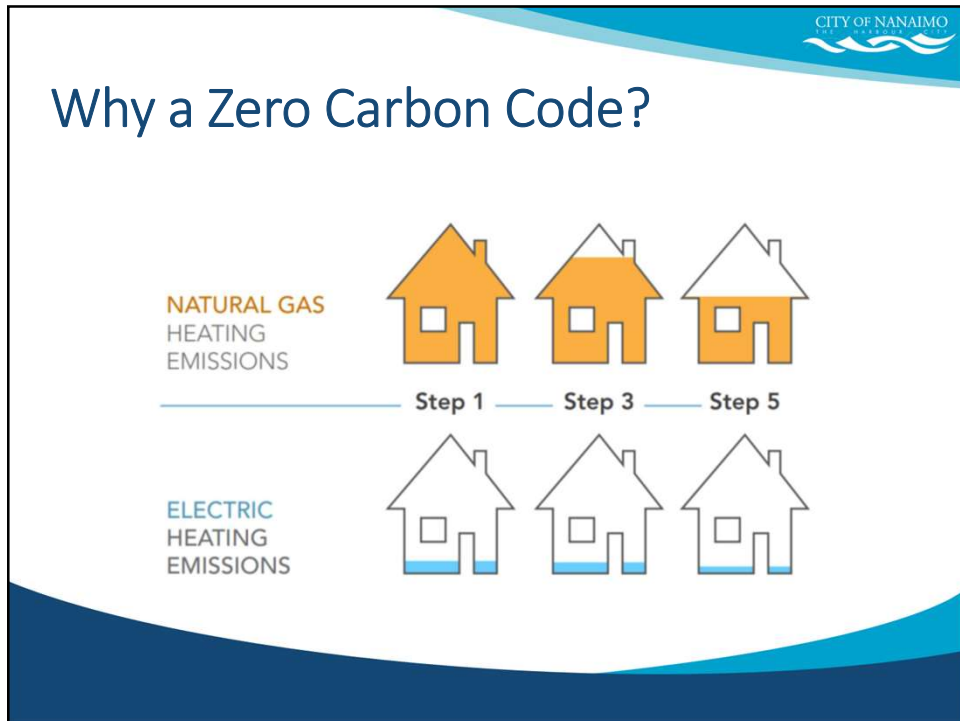
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Provincial Timeline

		2023-MAY-01	2024	2027	2030	2032
BC Energy Step Code	Part 9	Step 3		Step 4		Step 5
	Part 3	Step 2		Step 3		Step 4
Zero Carbon Step Code		Introduced Optional Compliance Path	TBD	TBD	Zero Carbon Performance Level (EL-4)	

We are here

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Why Zero Carbon Performance Level (EL-4)?

- Meet City’s climate goals
- Buildings accounted for 31% of Nanaimo’s emissions (2017)
- Net emissions reductions challenging to achieve while the City grows

Figure 7: Sources of Emissions in Nanaimo

Year	Waste - 6%	Mobility	Buildings & Infrastructure
2010	6%	67%	27%
2017	6%	63%	31%

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BC Energy Step Code in Nanaimo

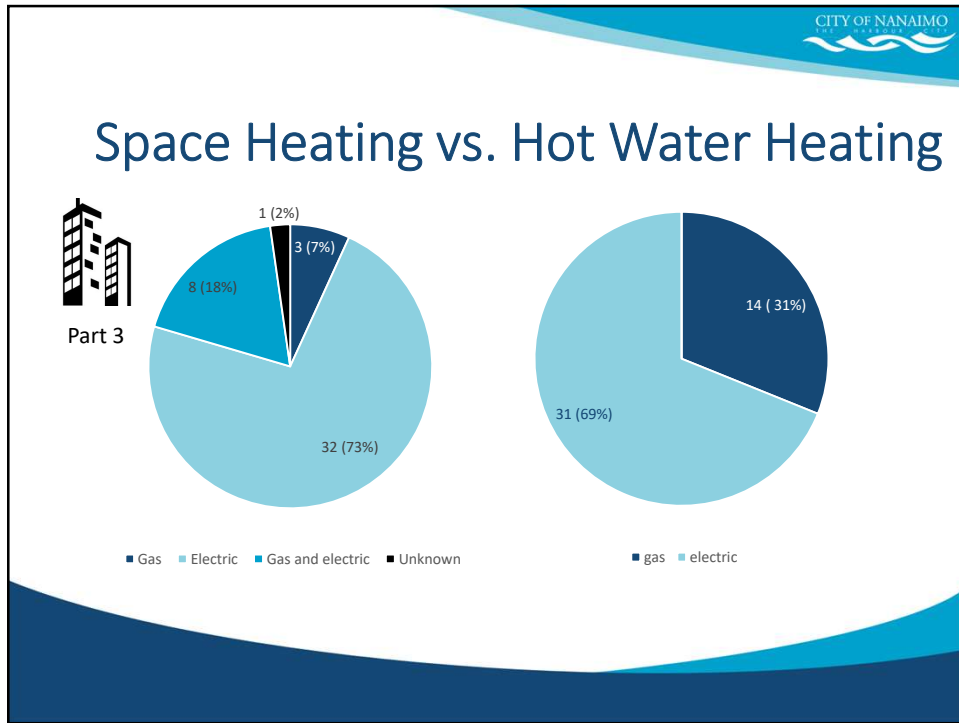
Part 3

Step	# of Buildings
Step 1	16
Step 2	19
Step 3	9
Step 4	1

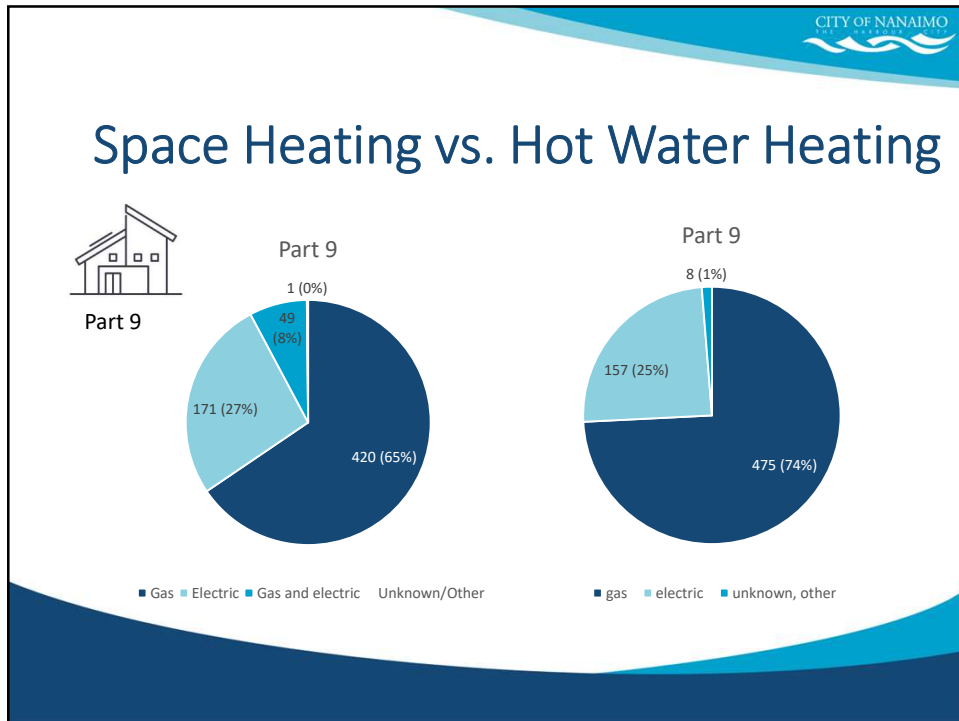
Part 9

Step	# of Buildings
Step 1	123
Step 2	247
Step 3	279
Step 4	10
Step 5	2

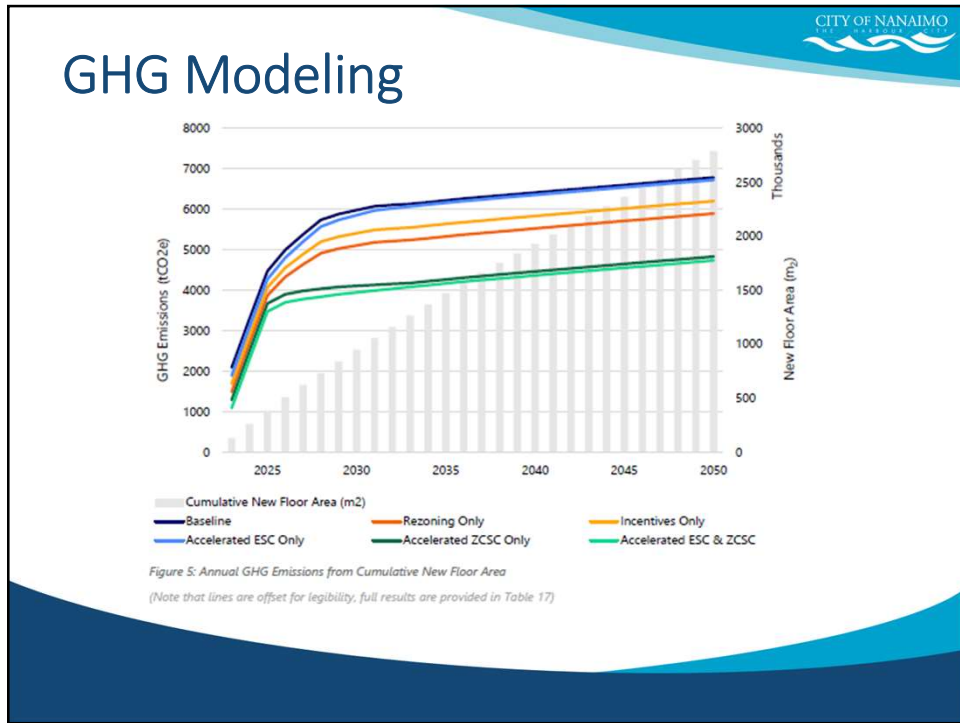
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Engagement Results

- Support for emissions reductions and energy efficiency improvement
- Incremental step changes are challenging
- Fewer changes even if it means accelerating the timelines
- Desire for consistency among jurisdictions
- Need for homeowners awareness and education

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Engagement Results

- Zero Carbon Step Code
 - Concerns about grid capacity and power reliability
 - Industry capacity or cost less of an issue
- Energy Step Code
 - Industry capacity – not ready for reaching the top step by 2025 but going to the next step possible
 - Cost – no financial incentive to build to the top step

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Cost Implications

- Top Level of Zero Carbon Step Code (ZCSC)
 - Capital cost increase minimal
 - Utility cost vary
 - Cost of future retrofits could be significant

- Top Step of Energy Step Code (ESC)
 - Capital cost increase higher
 - Lower utility cost

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Other Local Governments

Implementation: District of Saanich + City of Victoria

The diagram illustrates the implementation timeline for Zero Carbon Performance (ZCP) across different building types. It features three vertical dashed lines representing the implementation dates: November 2023, July 2024, and November 2024. Each date is associated with a 'ZERO Carbon Performance' icon. Below the timeline, building icons represent the types of buildings affected by each implementation date:

- November 2023:** Houses, townhouses, duplexes, triplexes, or garden suites.
- July 2024:** Condos + Apartments & storeys or fewer.
- November 2024:** Offices and All Condos + Apartments.


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Nanaimo Proposed Policy

Date	Building Types
Bylaw Adoption	Require all applicable Part 3 and Part 9 permit applications to meet Measure-only Level (EL-1) upon bylaw adoption
2024-JUL-01	Require all applicable Part 3 and Part 9 permit applications to meet Zero Carbon Performance Level (EL-4)
2026-JAN-01	Require all applicable Part 3 buildings to meet Step 3 of the Energy Step Code

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Next Steps

- Bring the Building Bylaw amendments;
- Support education, training, and capacity building;
- Educate homeowners;
- Review and update policies and guidelines;
- Monitor emissions reductions in new construction;
- Promote low carbon energy systems; and
- Work with BC Hydro to conduct a grid capacity analysis.

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