Creating a Canadian Digital Graphene Dome: Securing Sovereignty in a Fracturing Digital World

Issue:

Data privacy, cybersecurity, and AI governance have become battlefields in global economic and security competition. Recent moves by the EU (GDPR, AI Act), the US (AI Executive Orders, digital standards and fragmented state and local policies), and China (algorithmic control, ideological AI coding) show the digital economy is now core to national strategy.

Canada lacks sovereign control over key digital infrastructure and standards. Global competitors are embedding digital regulation into economic and national security policy. Without action, Canada risks losing competitiveness, citizen protection, and defense resilience.

Canada risks strategic marginalization without action.

Analysis:

Without sovereign digital control, Canada faces threats:

- Economic Threats: Loss of AI, fintech, and smart trade competitiveness.
- Security Threats: Data sovereignty breaches.
- Defense Threats: Cybersecurity gaps weaken NATO resilience.
- Global Influence Threats: Becoming 'rule-takers' under foreign regulatory regimes.

EU, US, and China are rapidly advancing extraterritorial digital influence. Canada must respond urgently. Canada risks being permanently sidelined by the EU, US, and China's digital spheres. Swift leadership will secure Canada's digital future.

Considerations:

Option A: Rely on Allied Infrastructure

- **Pros**: Lower upfront costs.
- **Cons**: Loss of control; long-term vulnerability.

Option B: Build Digital Sovereignty (Recommended)

- **Pros**: Anchors national security; enhances economic leadership; strengthens democratic norms.
- **Cons**: Requires major investment and intergovernmental coordination.

Recommendation:

Fund and deploy a 'Canadian Digital Graphene Dome' with:

- Sovereign cloud infrastructure.
- Al and data governance frameworks.
- NATO-aligned cyber investments.
- Indigenous digital sovereignty partnerships.
- Consider Indigenous digital sovereignty partnerships.
- Global digital governance leadership initiatives.

Digital sovereignty is the condition for national resilience in an intangible economy. Canada has no choice but to build this.

Background:

Graphene is 200 times stronger than steel, light and flexible. It's better than an Iron Dome.

GDPR and the EU AI Act redefine global digital standards on a rights-based model. The US and China seek digital dominance. Canada, as a high trust non-EU partner must seize this window to become a hub for secure, democratic digital commerce and innovation.

The G7 summit may also facilitate multilateral discussions on this area.

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