



Global Climate and Energy Policy Trends – 2024 and Beyond

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Jessica Olcott Yllemo, Director, Climate Security Programs

Overview



Regulatory

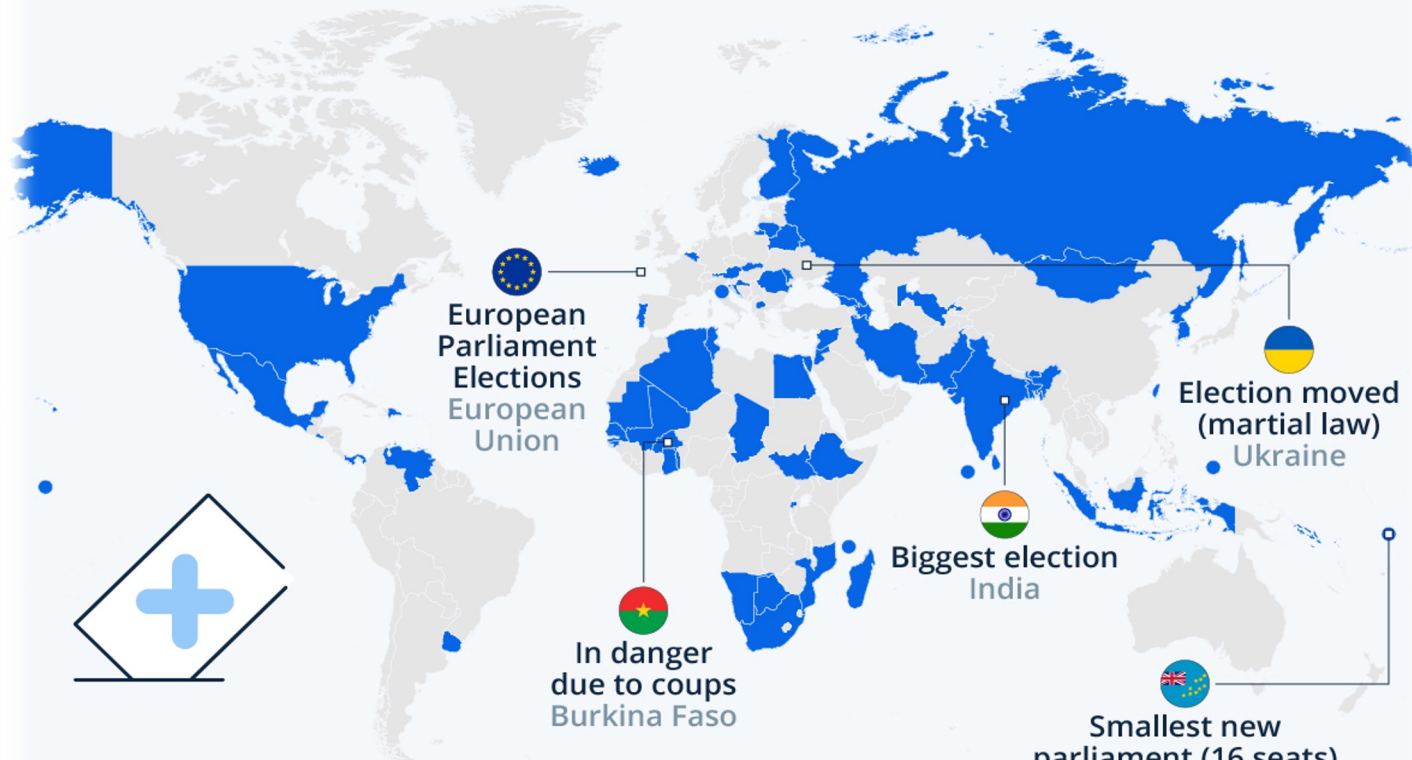


Operational

2024: The Super Election Year

Countries where a national election is/was held in 2024

Expected number of voters: **2B** (~25% of world pop.) Share of free elections*: **38%**



* Free and partially free: 75%

General, parliamentary, presidential and economic union elections

Sources: Anchor Change Election Cycle Tracker, Statista research



Regulatory – Global Elections & Climate Litigation



- ▶ Eight of the 10 most populous nations are going to the polls in 2024
 - ▶ Brazil, Pakistan, and Indonesia have already had their elections.
 - ▶ Ghana, South Africa, and Mexico as well as most of the European Union & EU Parliamentary Elections
 - ▶ India
 - ▶ April 2024: Supreme Court ruling "recognizes the right to be free from adverse effects of climate change"
 - ▶ EU
 - ▶ April 2024: European Court of Human Rights ruled in favor of the Senior Women for Climate Protection

Regulatory – SEC Climate Disclosures

- ▶ 2024 World Economic Forum’s Global Risk Report
- ▶ U.S. Securities and Exchange Commission (SEC)’s Climate Disclosure Rule
 - ▶ Complements similar standards from the International Sustainability Standards Board and the EU’s Corporate Sustainability Reporting Directive, as well as California’s rules
 - ▶ Disclosures about costs, expenditures, and losses as a result of physical risk (severe weather events, floods, wildfires) and transition risks (carbon offsets, moving away from fossil fuels)
 - ▶ Asks firms to disclose:
 - ▶ Climate Risk Impact
 - ▶ Mitigation and Adaptation
 - ▶ Board oversight and risk management
 - ▶ Climate Goals
 - ▶ Scope 1 and 2 emissions
 - ▶ Severe weather events
 - ▶ Carbon offsets



Regulatory – CBAM

Carbon Border Adjustment Mechanisms

- ▶ EU CBAM
 - ▶ United Kingdom (UK)
- ▶ Canada & Japan
- ▶ U.S. CBAM
 - ▶ Energy Innovation and Carbon Dividend Act
 - ▶ Market Choice Act
 - ▶ Foreign Pollution Free
 - ▶ PROVE IT Act



Regulatory – National Defense Industrial Strategy (NDIS)

- ▶ Published in January 2024
- ▶ Guides DOD’s engagement policy and investments in the defense industrial base (DIB) through four main lines of effort:
 - ▶ Create resilient supply chains
 - ▶ Ensure workforce readiness and development
 - ▶ Use the power of flexible acquisition
 - ▶ Engage in economic deterrence.
- ▶ Attempts to get at “Wicked Problems”



Regulatory – Critical Minerals & Supply Chains

- ▶ OASD Industrial Base Policy has embarked on a five-year rare earth investment strategy to build “mine-to-magnet” domestic capacity
 - ▶ Includes sourcing, separation, processing, metallization, alloying and magnet manufacturing.
- ▶ Department of Energy Critical Materials Collaborative (CMC)
 - ▶ Goal to align, grow, and coordinate funding for U.S. critical minerals research & innovation to accelerate commercialization, deployment, and development of secure domestic critical material supply chains



27 Co [Ar]4s ² 3d ⁷ cobalt 58.93	28 Ni [Ar]4s ² 3d ⁸ nickel 58.69	29 Cu [Ar]4s ¹ 3d ¹⁰ copper 63.55
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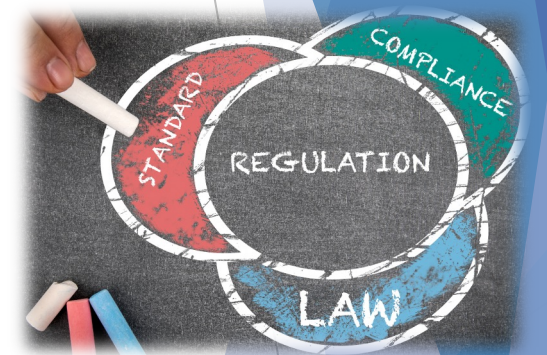
Regulatory – Artificial Intelligence

- ▶ Can significantly improve early-warning systems, disaster resource allocation.
- ▶ Can enhance extreme weather and flood forecasting methods and facilitate more robust preparedness
- ▶ Can improve data center efficiency, sustainability transform electric grids, and foster “smart” cities.
- ▶ Google’s DeepMind weather AI (Graphcast)
- ▶ AI intensifies GHG emissions and demands large amounts of energy and water.
- ▶ Data centers use large amounts of water and are frequently located in places that already face water scarcity.
- ▶ Rapidly spreads climate mis/disinformation



Regulatory – Artificial Intelligence

- ▶ (U.S.) Executive Order 13960
 - ▶ Intended to establish new standards for AI safety and security, protect American’s privacy, and help consumers and workers.
 - ▶ Outlines eight fundamental principles
- ▶ (U.S.) AI Safety Institute Consortium (AISIC)
 - ▶ More than 200 stakeholders from across private industry industry, academia, government
- ▶ (EU) AI Act
 - ▶ EU Parliament set to give final approval in May 2024.
 - ▶ Mandates transparency and underscores EU copyright laws
 - ▶ Creates three risk categories (Unacceptable risk; High risk; Not Explicitly Banned or Listed)



Regulatory – Mis/Disinformation & Climate

- ▶ World Economic Forum identified AI generated mis/dis information as one of the world's greatest threats.
- ▶ Slovakia's (SEP 23) elections were marred by AI generated content.
- ▶ In 2022, Intergovernmental Panel on Climate Change (IPCC) named climate change misinformation and the “politicization of science” as major barriers to action for the first time.
- ▶ AI is facilitating widespread mis/disinformation around significant meetings, especially UN Conference of the Parties (COP).
- ▶ 2023 Maui wildfires



Operational – Extreme Weather Events

- ▶ Wildfires
 - ▶ Burning 400 degrees hotter than before
 - ▶ FY16-FY22: Number of National Guard personnel hours spent fighting wildfires went from 14,000 to 176,000.
- ▶ Extreme Heat
 - ▶ Hottest year (2023)
 - ▶ Rise of the Chief Heat Officer
- ▶ Humanitarian Assistance/Disaster Relief (HA/DR)
 - ▶ 2024 Hurricane season
 - ▶ 2017 (Harvey, Irma, Maria)



Operational – Project CASA

Project: Studies extent of national military involvement in responses to climate-related emergencies

- NATO countries, NATO partners, and others with high exposure or high military involvement
- Domestic and foreign responses

Funding: Canadian Department of National Defence

Partners: Five project partners



Operational – Project CASA

Project assesses:

- Levels, **patterns and trends** in military involvement
- Legal, funding and operational **frameworks**
- Domestic **training** and cross-border **cooperation** for civil-military cooperation
- Implications of **specialization** versus training all armed forces
- Competitive **advantages** of military and civilian agencies



Operational – Project CASA

New **country profiles** on civil-military cooperation in climate emergencies show:

- Stark differences in legal and policy frameworks guiding military roles
- Range of military approaches to civil protection: stand-alone units, dual-use units, specialized personnel, and full-force training
- Similarities and variation in civil protection tasks of military and civilian agencies
- More limited scope of military tasks in some countries' *foreign* civil protection



Operational – Project CASA

New **cross-national dataset** on military involvement in climate emergencies

- Aims to provide comprehensive coverage for included countries
- Uses government sources for systematic and uniform data collection
- Includes only military responses to *climate-related* events





Project CASA
Climate and Security Action

<https://www.project-casa.org/>