How Intervening on Compute Can Lead to Concrete Risk-Reducing Policies

Capacities

Visibility

Using public information about compute quantities to estimate actors' AI capabilities.

Required reporting of training compute usage from cloud providers and AI developers.

International AI chip registry.

Privacy-preserving workload monitoring.

Allocation

Differentially advancing beneficial AI development.

Redistributing AI development across and within countries.

Changing the overall pace of AI progress.

Collaborating on a joint AI megaproject.

Enforcement

Enforcing "compute caps" by physical limits on chip-chip networking.

Hardware-based remote enforcement.

Preventing risky training runs via multiparty control.

Digital norm enforcement.