Planning A REGULATORY FRAMEWORK FOR NANOTECHNOLOGY RELATED ACTIVITIES IN SRI LANKA

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Outline

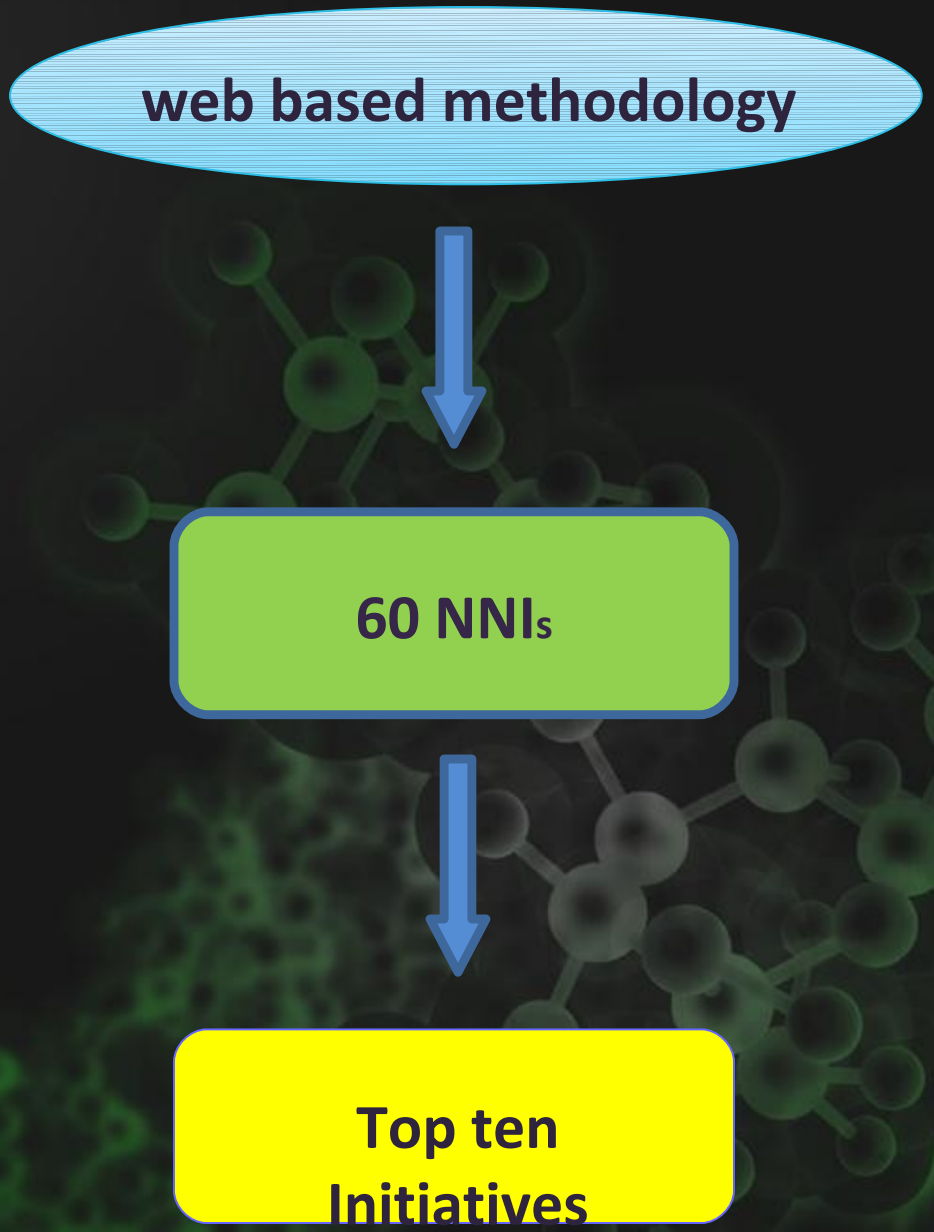
- Background
  - Why we need this
  - Current status of Sri Lanka
- Objectives
- Materials & Methods
  - Analysis of 60 NNIs
  - In-depth analysis of top ten countries
- Elements of a Regulatory Framework
- Recommendations

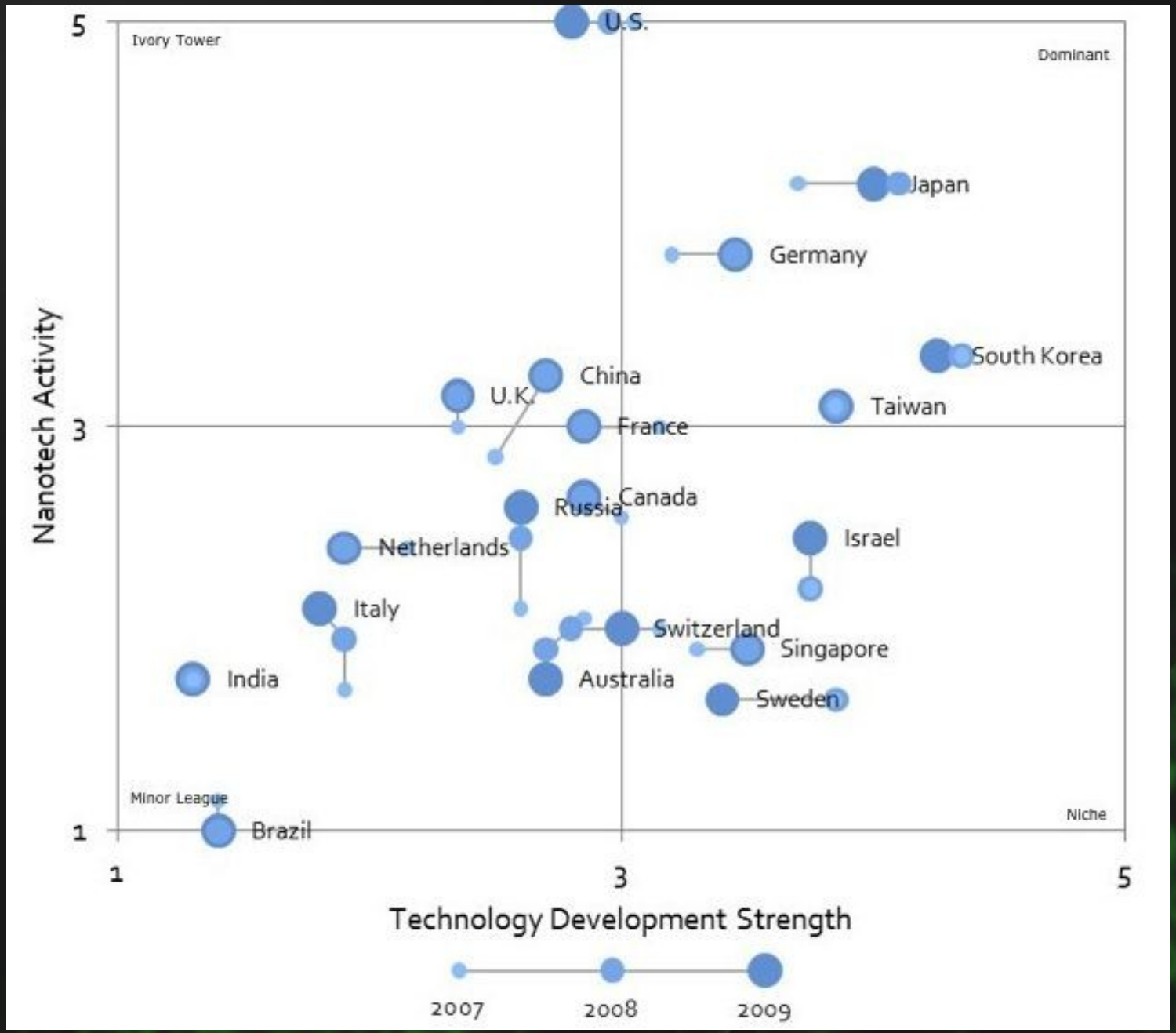
Background

- Nanotechnology ka
- Great potential f nent
- At present the Ri ta are unknown
- Cannot afford to embark on expensive research for classifying risks
- Knowledge of up-to-date findings of the world can be used to develop a draft framework appropriate to the country

Objectives

- The salient mechanisms of the predominant National Nanotechnology Initiatives (NNIs) of the world
- In-depth analysis of the top ten NNIs
- Development of a draft regulatory framework for nanotechnology related activities in Sri Lanka


web based methodology
60 NNIs
Top ten Initiatives



Source: David Hwang, Lux Research

Top Ten Countries

	Country	Research & Community	**Commercial Organizations**
1	US	741	1162
2	Japan	69	62
3	Germany	193	225
4	South Korea	33	28
5	China	28	45
6	UK	173	158
7	Taiwan	20	11
8	France	55	44
9	Canada	61	84
10	Australia	73	50

In-depth analysis of Top Ten countries

- Nanotech Initiatives & Centers
- Industry & Market trends
- Policy actors
- Spending/ Investment
- Risk governs / Framework
- Corporate spending
- Nanotech publications & Patents
- International Coordination & Cooperation

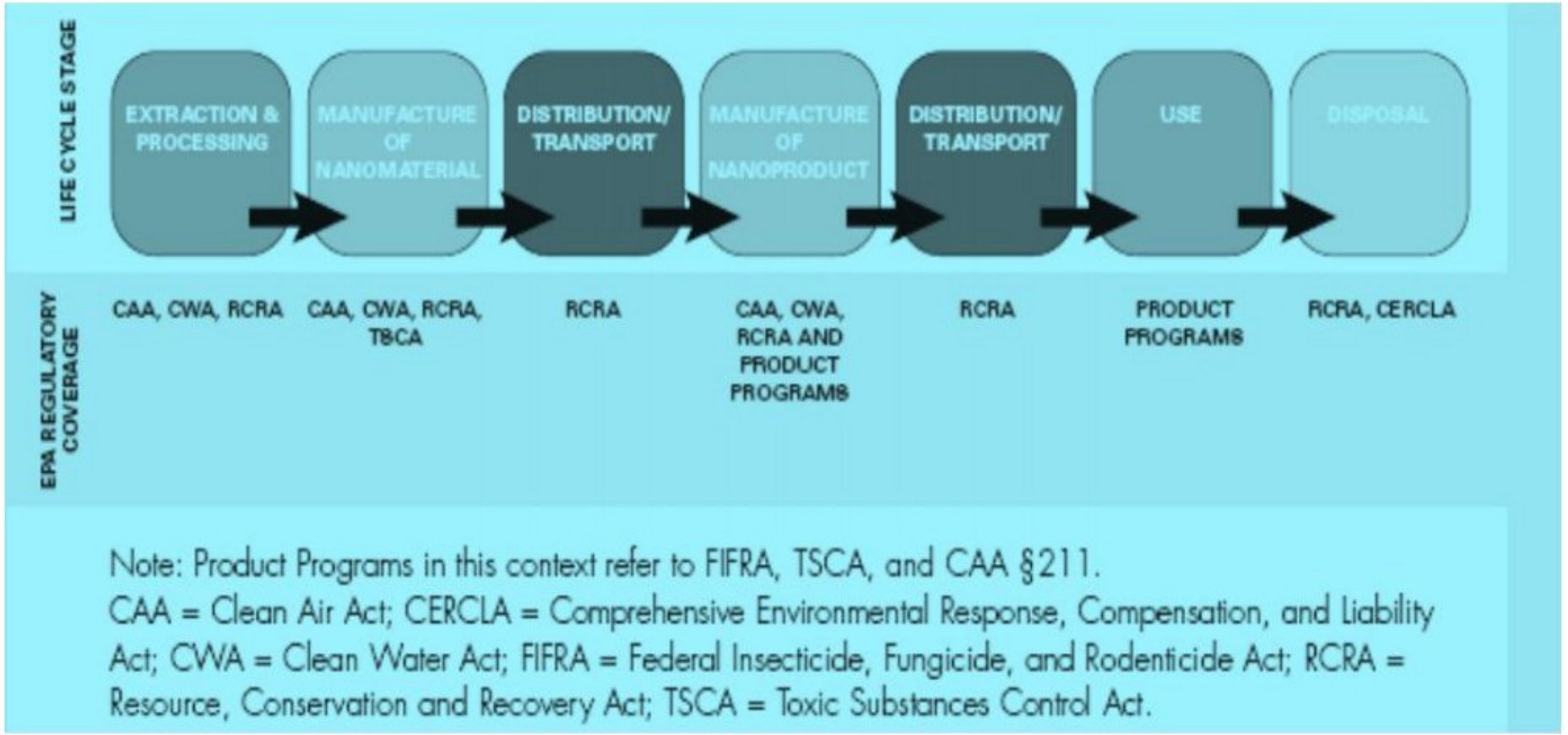


Figure Nano Life Cycle and corresponding EPA regulatory coverage (figure from reference)

Nano Life Cycle and corresponding Environmental Protection Agency (EPA) regulatory coverage USA

Elements of a Regulatory Framework

- Focus on environment, public and worker health and safety - Policy
- Allocation of a percentage of R&D budget to address implications – Allocation of resources
- Establishment of appropriate infrastructure and well trained & skilled work force – ORG & HR
- Occupational health surveillance, exposure registries, epidemiological research – Ongoing Continuing action

- Regulatory regimes with emphasis on additional product chemistry, toxicology, exposure and environmental data. e.g.USA
  - Toxic Substance Control Act (TSCA)
  - Strategic chemical Mgt (CEA)

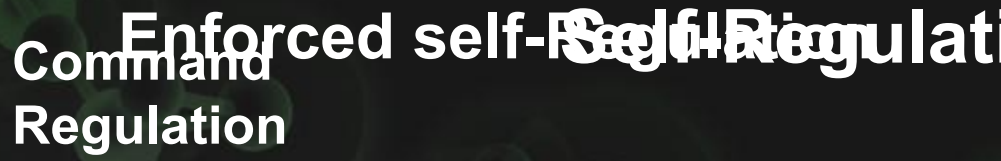
- Physical & Chemical properties of Nano materials, potential adverse health effects and control measures should be provided to directly involved workers – NIOSH, SLSI

Recommendations

- Planning with the involvement of relevant stakeholders specially the general public
- Establishment of lead agencies
- Labeling of Nano materials in consumer products, including customs control
- Training of workers involved in Nano material production

Recommendations *contd*..

- Sri Lanka should focus on ;

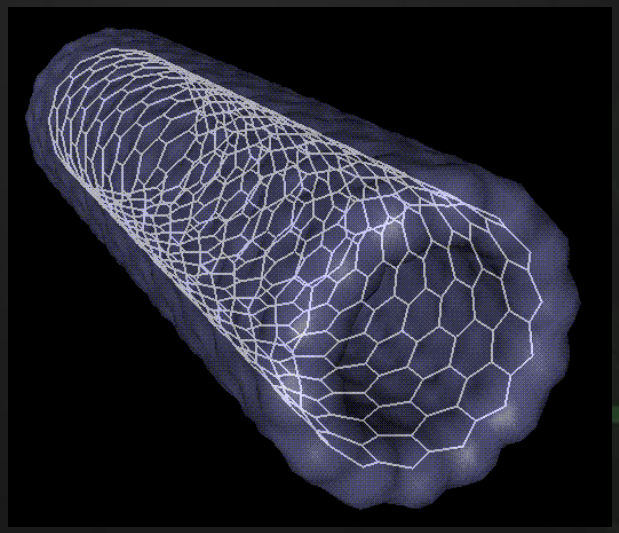


- Economic tools to promote adherence of companies to the industry code of conduct
- Strong & effective review and approval process for environmentally beneficial new products

Recommendations *contd..*

- Nano mark certification system
- Institutions to monitor and administer arising policy issues
- Establish criteria for determining emergency situations
- Sharing of latest knowledge on identifying, assessing and managing nanotechnology specific risks

Networking domestically and internationally



THANK YOU ☺