Japan’s Bioeconomy Vision Outline
Bioindustry’s Social Contribution to Enhance Adaptation to Changing World
- Creation of new key industry and provide solutions on global issues-

**Background**

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<th>Global Level Issues</th>
<th>Policies, Strategies</th>
<th>Technological Changes</th>
<th>National Level Issues</th>
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<td>2030 Agenda, COP21 Agreement</td>
<td>Bioeconomy, Horizon2020, etc</td>
<td>Synthetic Biology, genome editing</td>
<td>Industry reformation, Aging</td>
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Bioindustry’s social contribution in 2030: 40 trillion yen impact by industrial growth with global issue solution

**Key Technology Development for Bioindustry Promotion: Needs industry, academia government collaboration**

- **Healthy longevity achievement by destructive innovation**
  - Together with latest biotech, fusion of ICT/IoT, nanotech, robot engineering create a mainstream health industry to enable healthy longevity society inclusive of elderly and handicapped.
  - Become a nation that can provide worldwide solution in health and medical field

- **Shift to sustainable manufacturing and new industry generation**
  - Original and competitive biotechnology and bioproduct enables new industry emergence using sustainable source and innovative production method.
  - Japan to play a major role in manufacturing, environment and energy segment (COP target achievement)

- **Industrial farm involvement and food export promotion**
  - Industrial farm involvement to create series of new business and employment
  - Agricultural reformation contributes to working population decrease, global warming and food supply
  - Branded foodstuff export increase with international recognition of taste and soundness

**Key Technology (i.e. genome editing, etc) needs industry, academia government collaboration: Survey, impact analysis, action planning are to be shared.**

Key technology in respective field:
- **Health/Medicine**: New drugs, medical devices, treatment, prevention, care technology, information integration.
- **Manufacturing/Environment/Energy**: Breeding, selection, improvement, production technology variety (smart cells, plants, insects).
- **Agr./Forestry/Fishery/Foodstuff**: New breed production, health benefit, processing, preservation, taste, safety technologies

**Actions for Industrial Promotion: Common understanding of the vision and ecosystem installment**

- **National Vision Sharing on Biotech**: Innovation by biotechnology to generate new business and provide global solution.
- **Innovation ecosystem establishment**: System to generates new bioventure and innovation (Industry, academia and government, venture supporters share the roles)
- **Fair business environment and international presence**: Action towards CBD, new market, international pledge
- **Human resource and communication promotion**: Generate talent with future views, entrepreneurship, science communication

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