

Legal and policy framework for CCUS development in Japan

日本におけるCCUSの法政策フレームワーク

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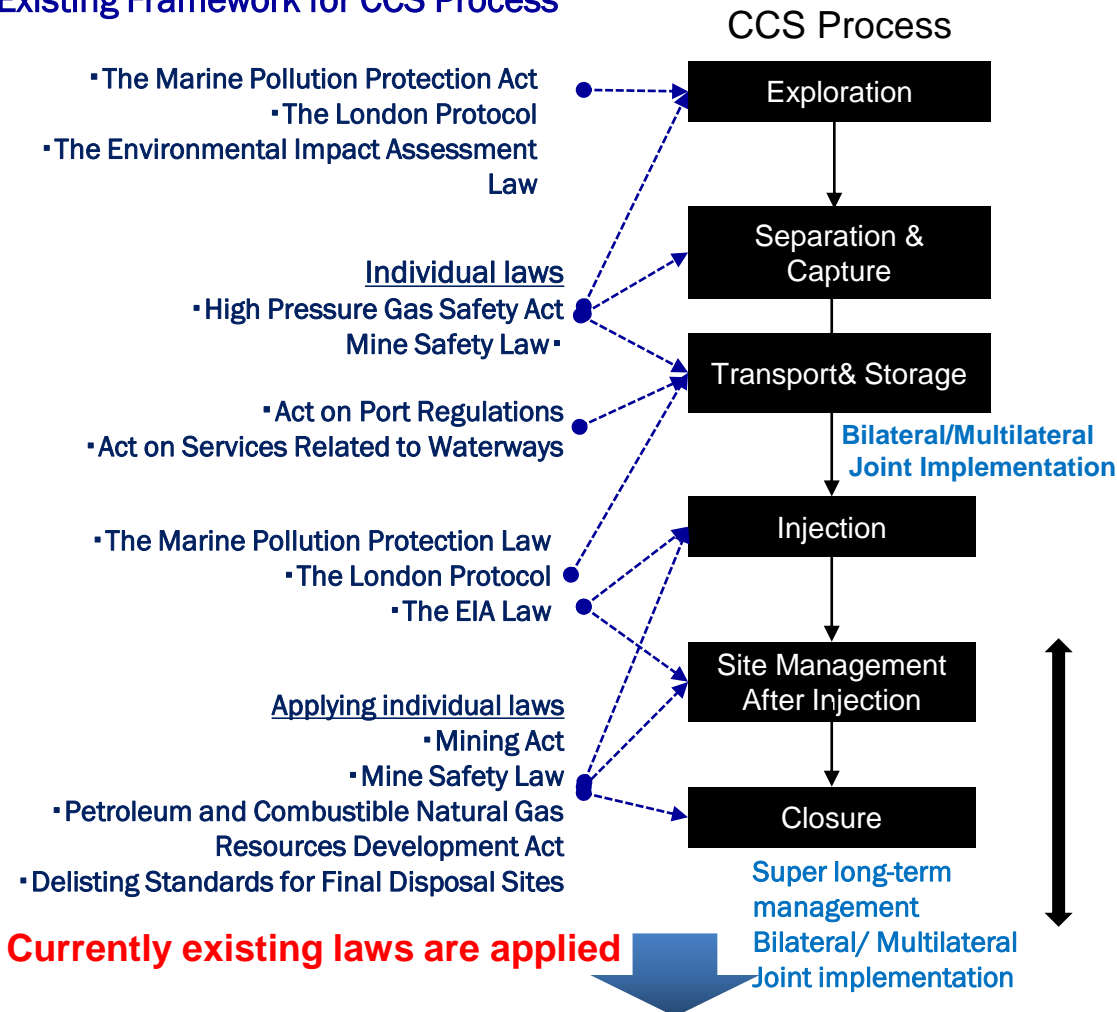
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Current Status for the Japanese CCS Legislative and Regulatory Framework

CCS 法制度及び規制的枠組みの現状

Existing Framework for CCS Process



- | 広範な課題 |
|---|
| 1. Classifying CO2 |
| 2. Property rights |
| 3. Competition with other users and preferential rights issue |
| 4. Transboundary movement of CO2 |
| 5. International laws for the protection of the marine environment |
| 6. Providing incentives for CCS as part of climate change mitigation strategies |
| 既存の課題への反映 |
| 7. Protecting human health |
| 8. Composition of the CO2 stream |
| 9. Environmental impact assessment |
| 10. Third-party access to storage site and transportation infrastructure |
| 11. Engaging the public in decision making |
| CCS特定の課題 |
| 12. CO2 capture |
| 13. CO2 transportation |
| 14. Scope of framework and prohibitions |
| 15. Definitions and terminology applicable to CO2 storage regulations |
| 16. Authorisation of storage site exploration activities |
| 17. Regulating site selection and characterisation activities |
| 18. Authorisation of storage activities |
| 19. Project inspections |
| 20. Monitoring, reporting and verification requirements |
| 21. Corrective measures and remediation measures |
| 22. Liability during the project period |
| 23. Authorisation for storage site closure |
| 24. Liability during the post-closure period |
| 25. Financial contributions to post-closure stewardship |
| CCSの新たな問題への対応 |
| 26. Sharing knowledge and experience through the demonstration phase |
| 27. CCS ready |
| 28. Using CCS for biomass-based sources |

No comprehensive framework for CCS legislations and regulations in Japan yet

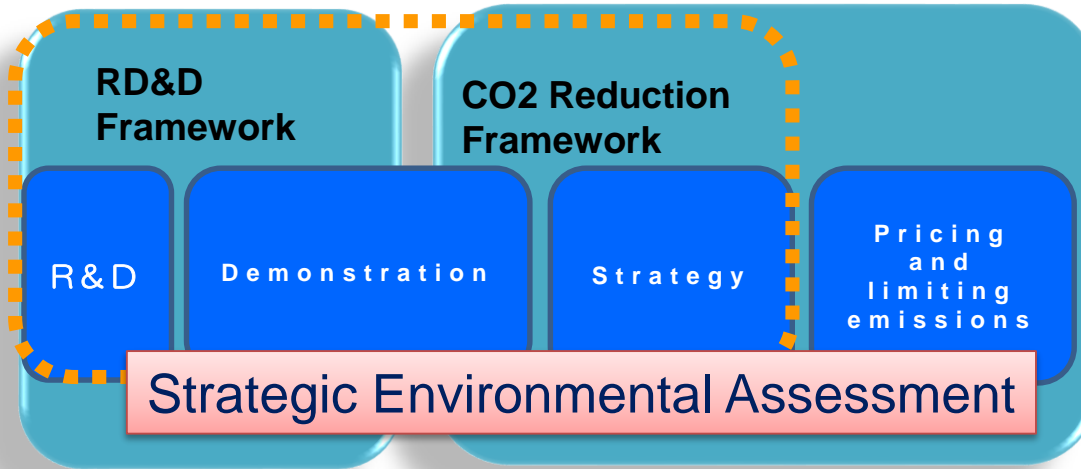
Strategic Framework for CCS Policy Development

CCS政策の戦略フレームワーク



Constructing Policy Mix

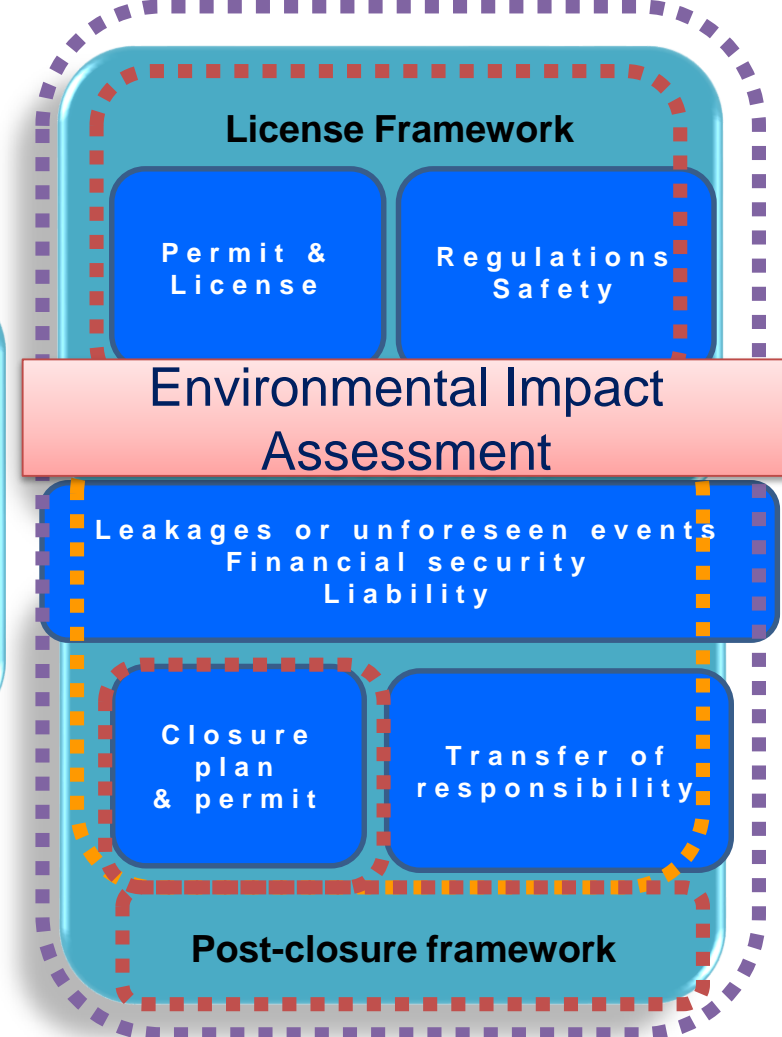
- Funding
- Technology policy
- Pilot projects
- Feed-in-Tarif
- Low carbon portfolio standard
- Removing market barriers
- R&D policy for cost efficiency
- Funding support for R&D



- Demonstration projects on plants
- Policy for CCS development
- Capacity building for related CCS industries

- Emission reduction
- Mandatory CCS
 - Energy efficient standard
 - Emission reduction standard
- Carbon pricing
- ETS
 - Carbon tax

Legal Framework



The Key Legal Requirements for a CCS Legal Framework

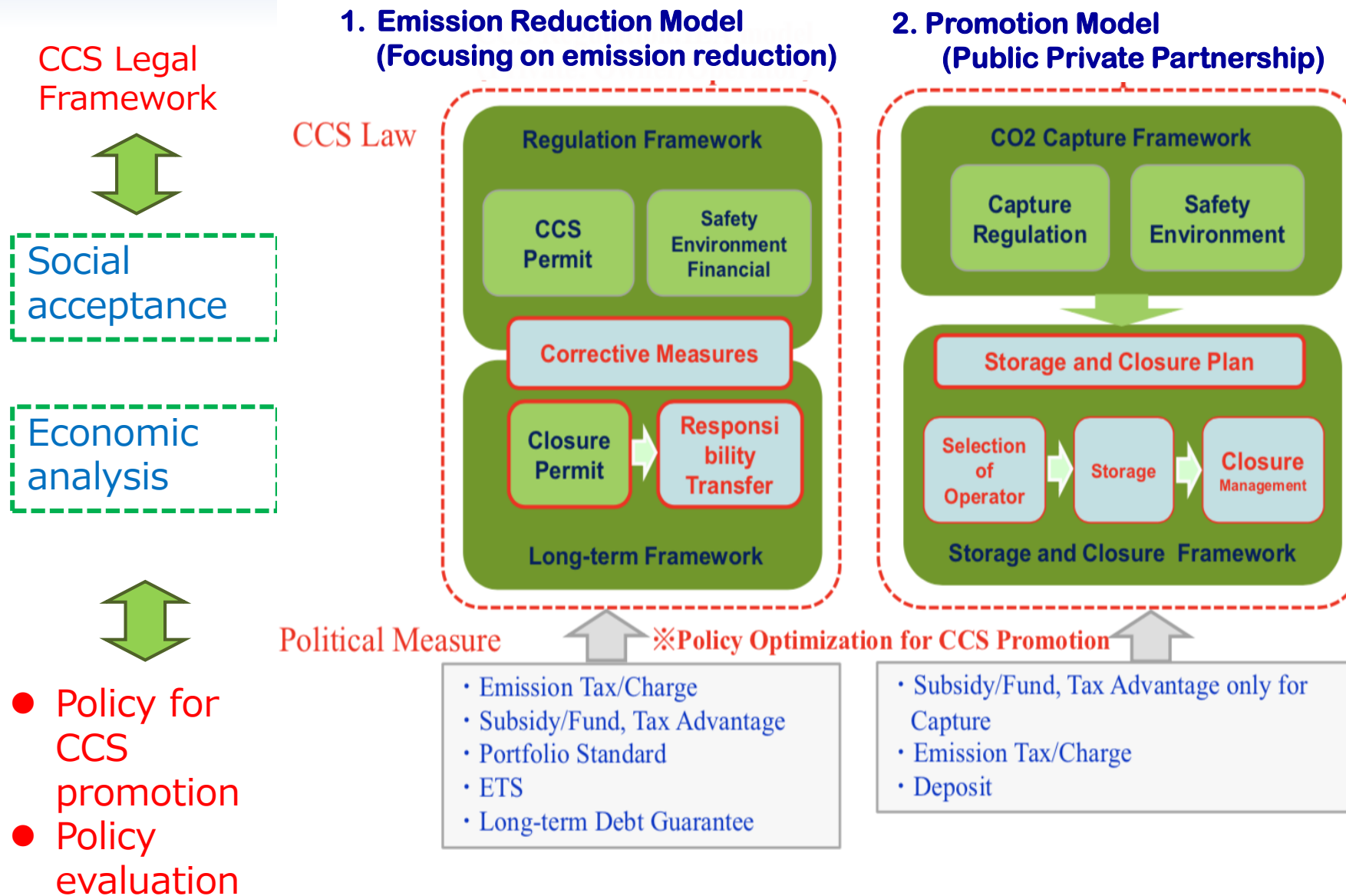
CCS法フレームの重要な法的要件

- Storage and closure plan permits
- Storage and closure regulations
- Risk assessments for CO2 leakages
- Long-term financial mechanism and liability
- Financial security and mechanism for closure
- Corrective measures for Irregularities
- Performance standards and legal requirements for closure (※Determining transfer of liability)
- Long-term liability and transfer of responsibility
- Competent authority and permit process

A long term financial mechanism includes MRV, maintenance, irregularities, corrective measures, CO2 credit liability.

Japan's Framework for Commercial CCS Deployment

商用CCS開発のための日本型枠組み

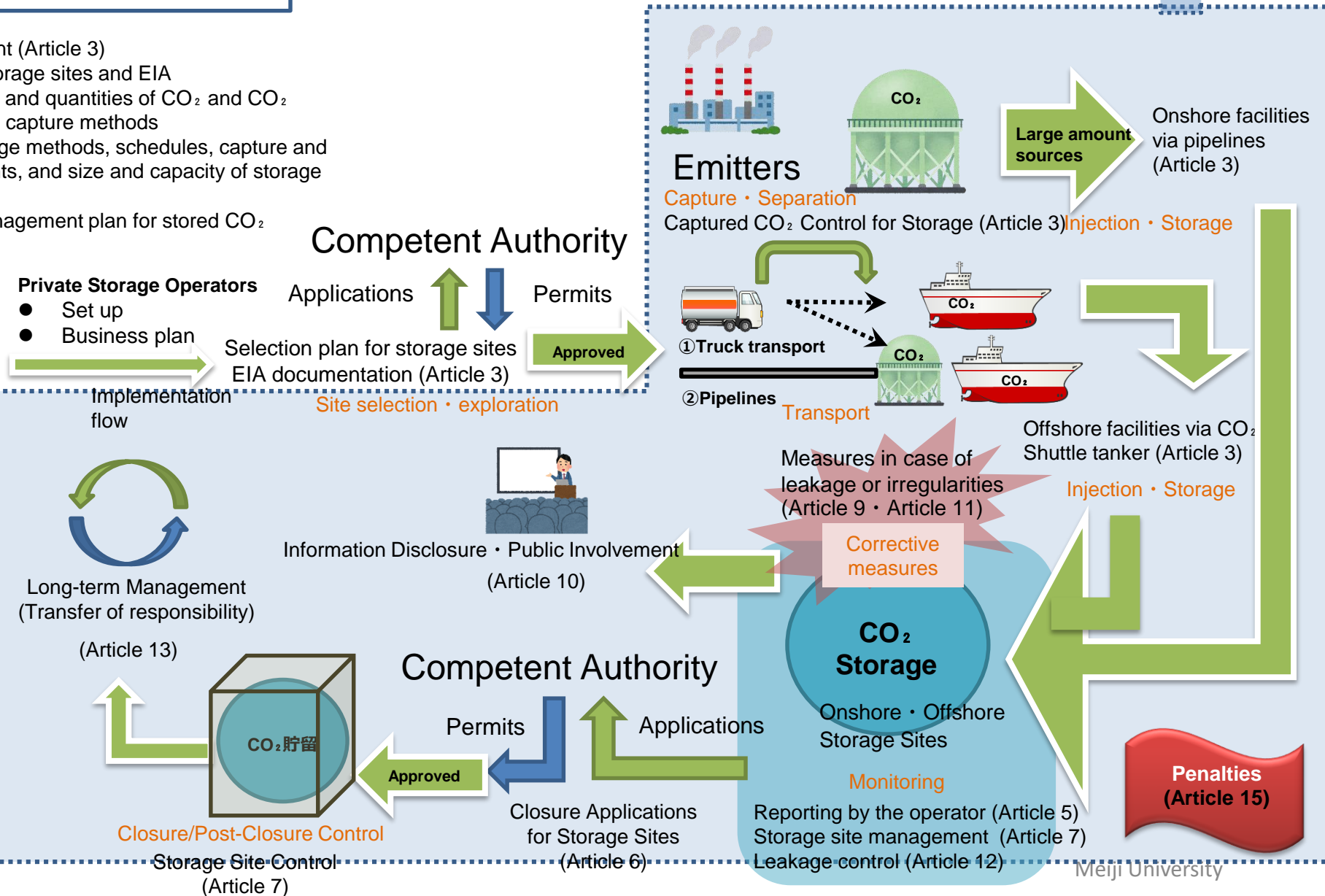


1. Emission Reduction Model(Regulation)CCS排出抑制型

Competent Authority
 ● Review · Verification (Article 8)
 ● Audit · Corrective Measure Requirements, Substitute Execution (Article 11)

Article 1 : Purpose of Legislation

- Permit requirement (Article 3)
- Selection of storage sites and EIA
 - Characteristics and quantities of CO₂ and CO₂ separation and capture methods
 - Injection, storage methods, schedules, capture and storage amounts, and size and capacity of storage sites
 - Long-term management plan for stored CO₂



2. Promotion Model(Public Private Partnership)CCS事業誘導型

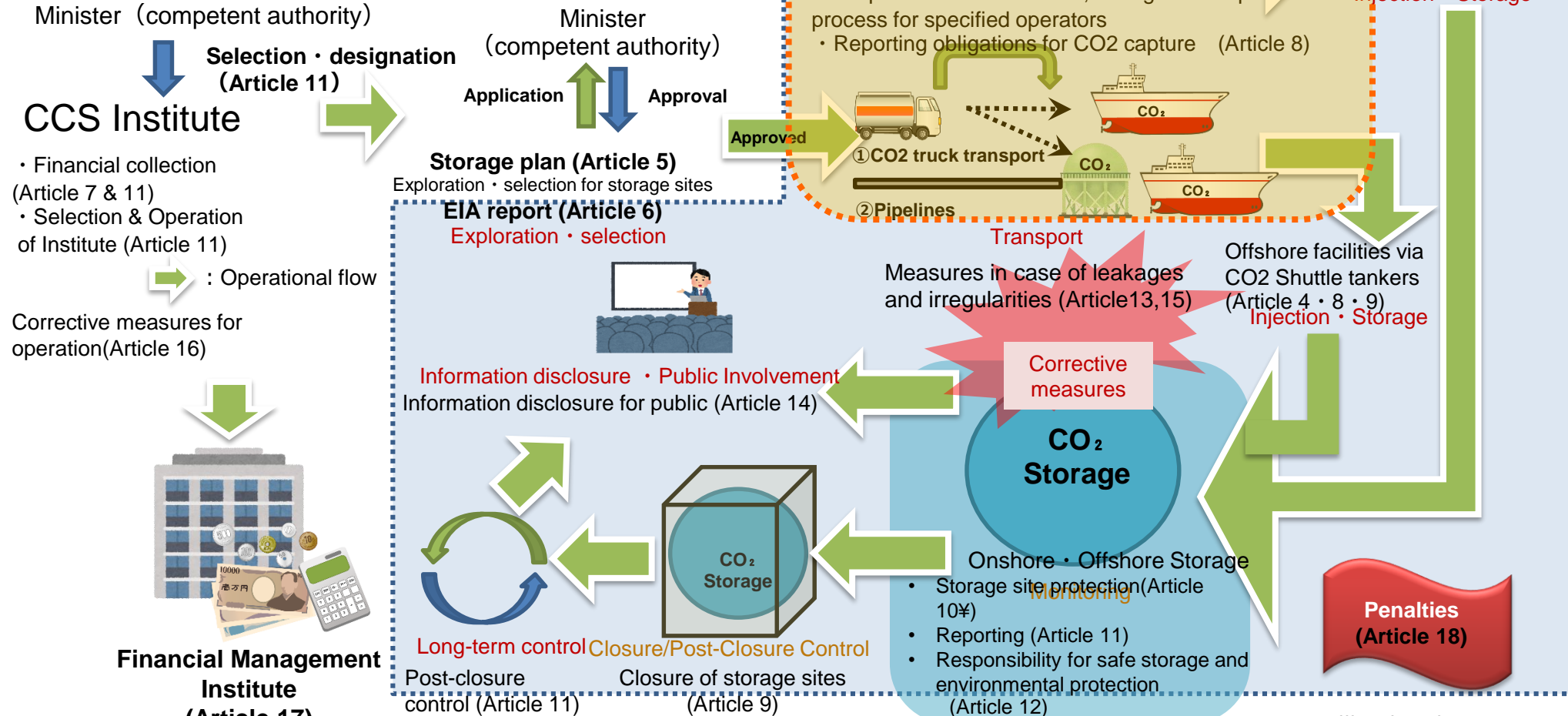
Article 1 : Purpose of Legislation

Permit requirement (Article 4)

- Selection of storage sites and EIA
- Characteristics and quantities of CO₂ and CO₂ separation and capture methods
- Injection, storage methods, schedules, capture and storage amounts, and size and capacity of storage sites
- Long-term management plan for stored CO₂

Competent Authority

- Review · Verification (Article 12)
- Audit · Corrective Measure Requirements, Substitute Execution (Article 15)



Conclusion

結論

- CCS will play a key role in our Carbon Neutral Target
- Limitations for the Current Policy and Legal Framework
- Japan will need our own framework by considering various key requirements
- Our Public Private Partnership Model with a comprehensive legal framework might be useful for making it more viable

Thank you for your attention
ご清聴ありがとうございました。

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