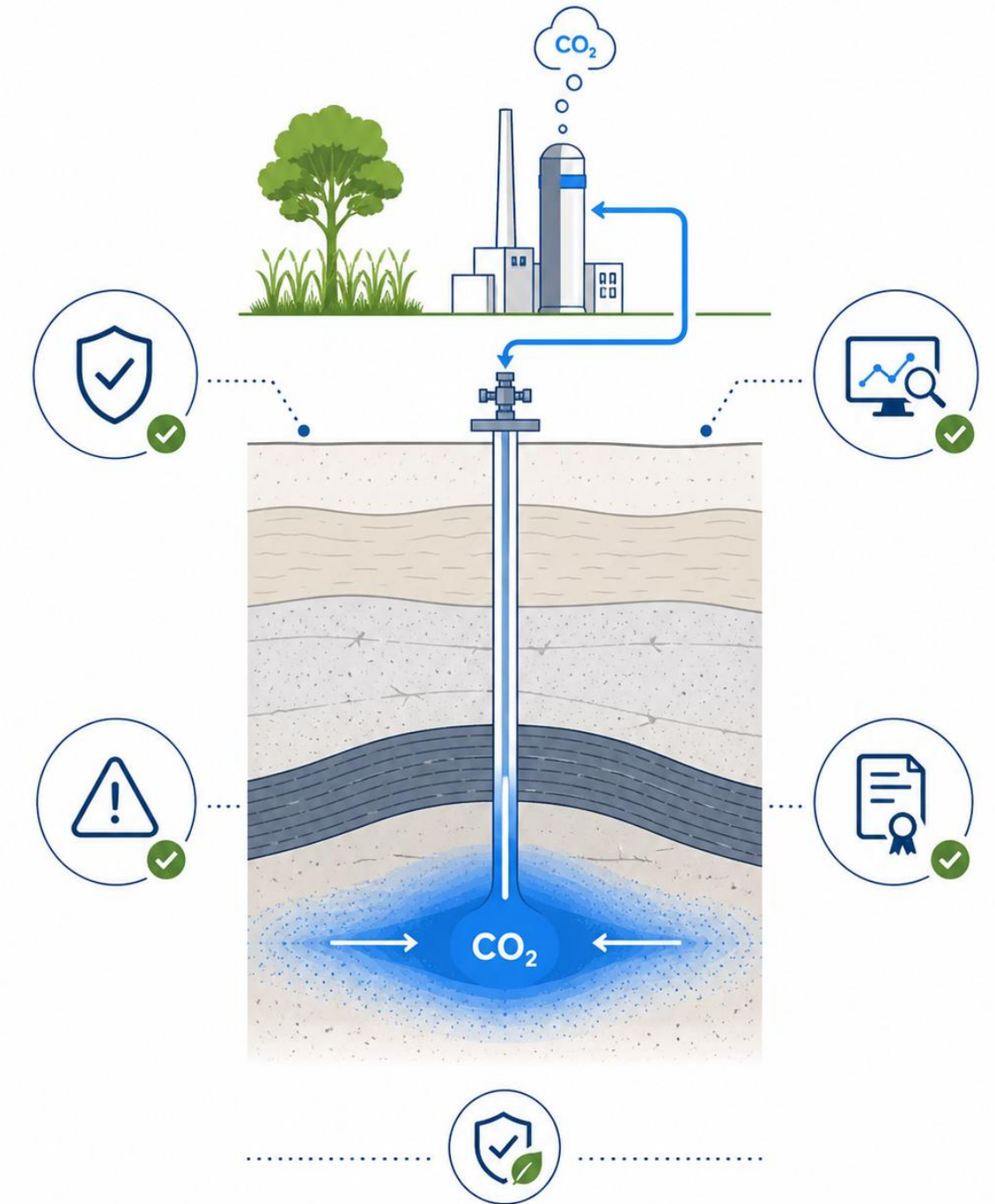


# Permanent Abandonment Challenges for CO<sub>2</sub> Injection Wells in BECCS Projects

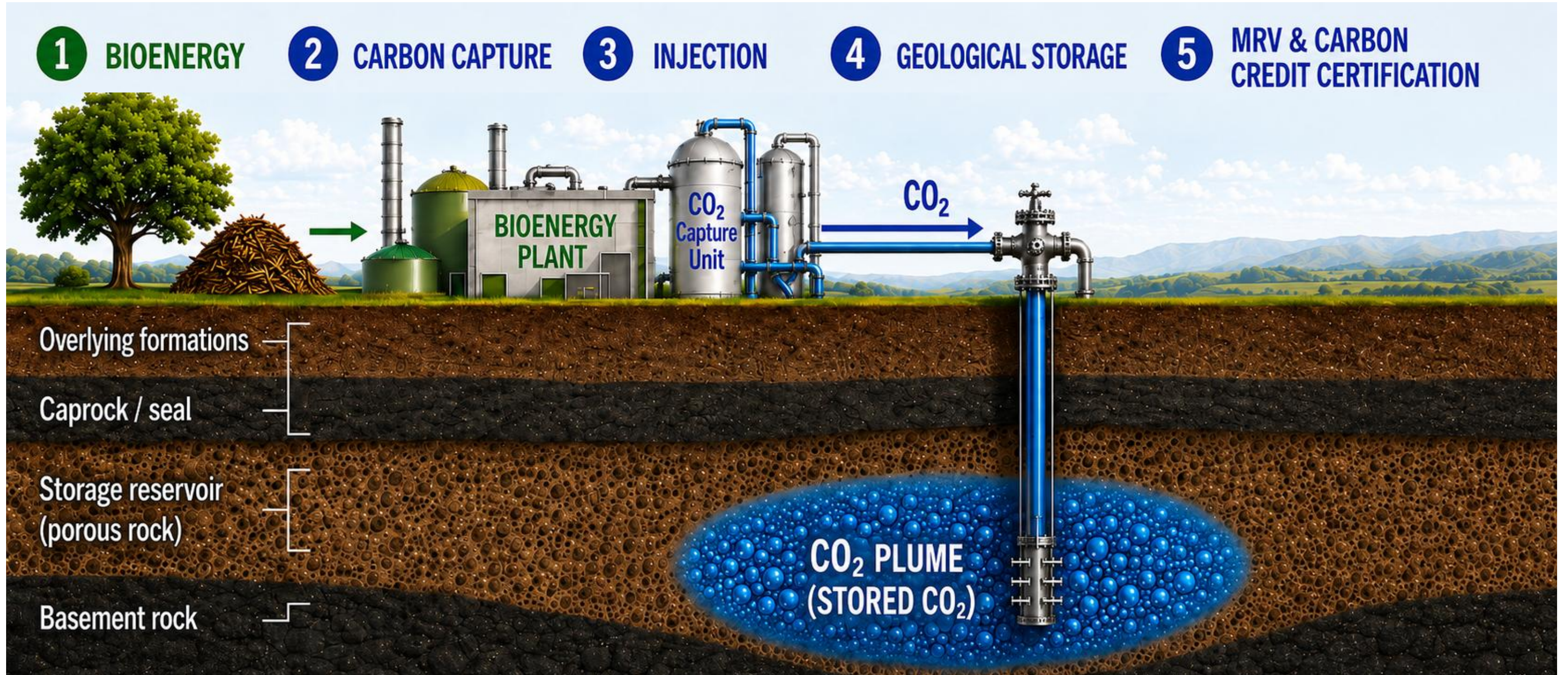
# Presentation Roadmap

- 1 Introduction
- 2 CO<sub>2</sub> Injection Well Abandonment
- 3 Abandonment Challenges and Main Risk Mechanisms
- 4 Mitigation Strategies for CO<sub>2</sub> Well Abandonment
- 5 MRV, Permanence and Carbon Credits
- 6 Final Remarks



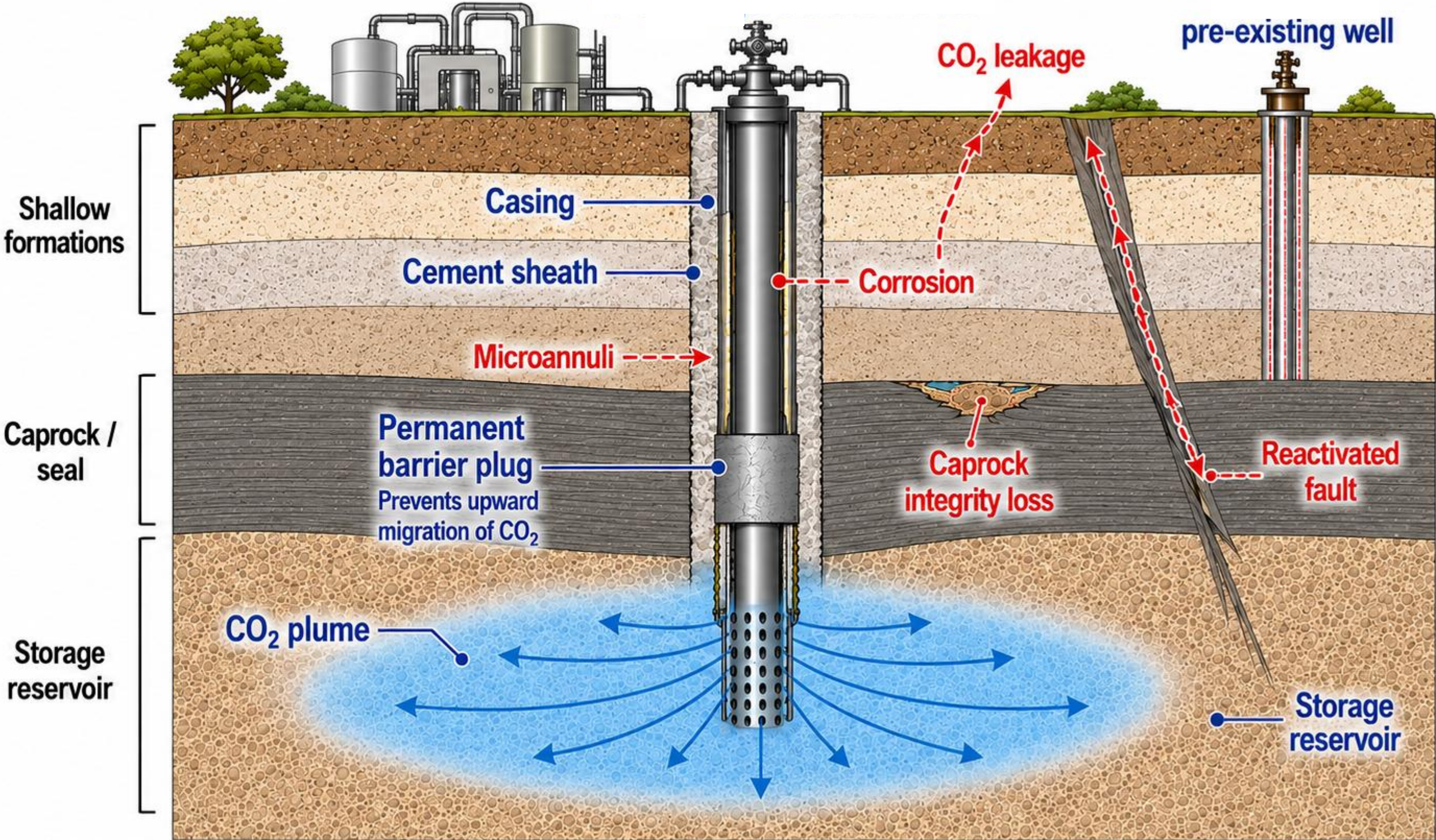
Source: Adapted from Shuck, Davis and Diller (2025).

# Introduction



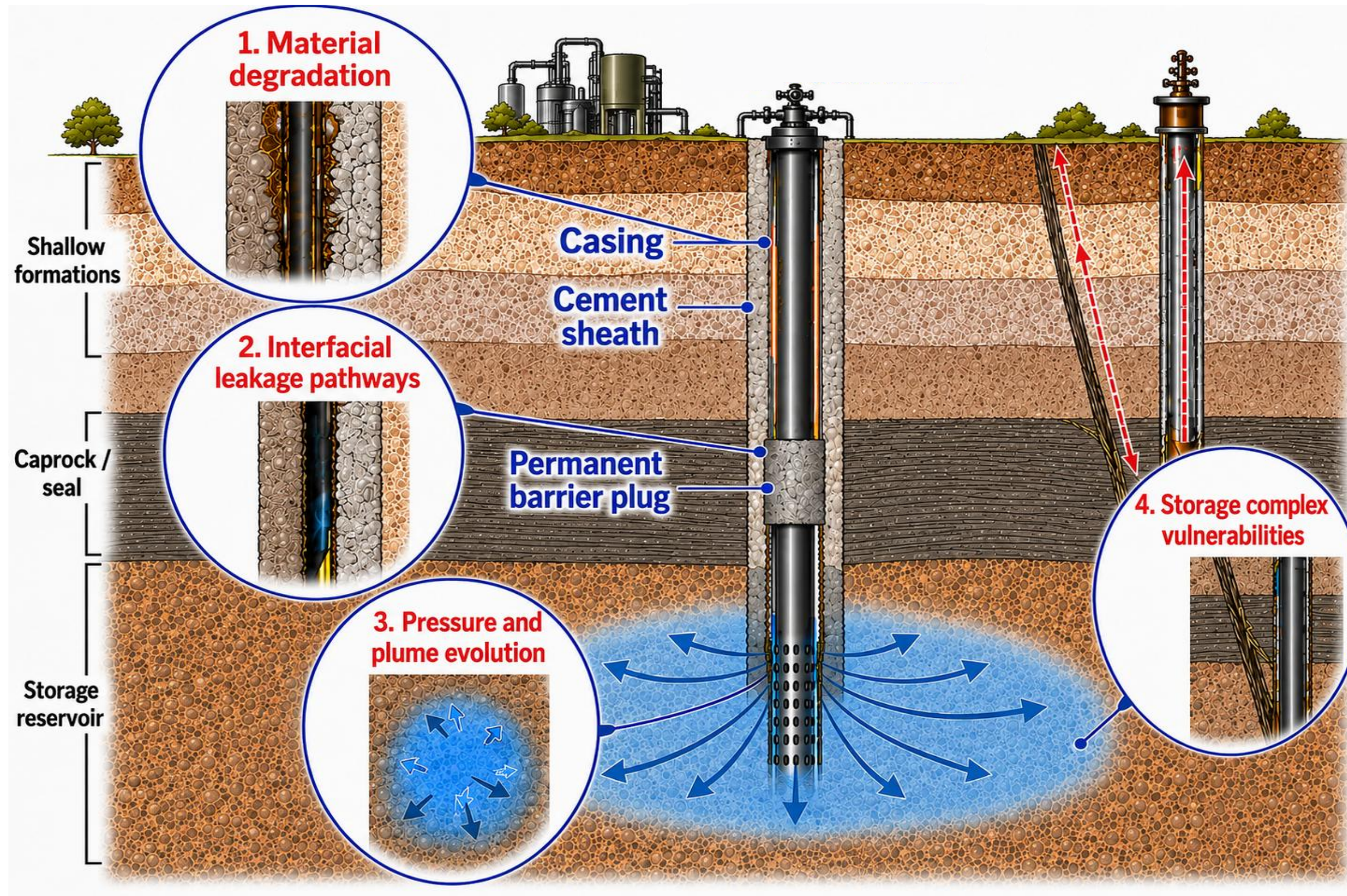
Source: Adapted from Shuck, Davis and Diller (2025).

# CO<sub>2</sub> Injection Well Abandonment



Source: Adapted from Shuck, Davis and Diller (2025).

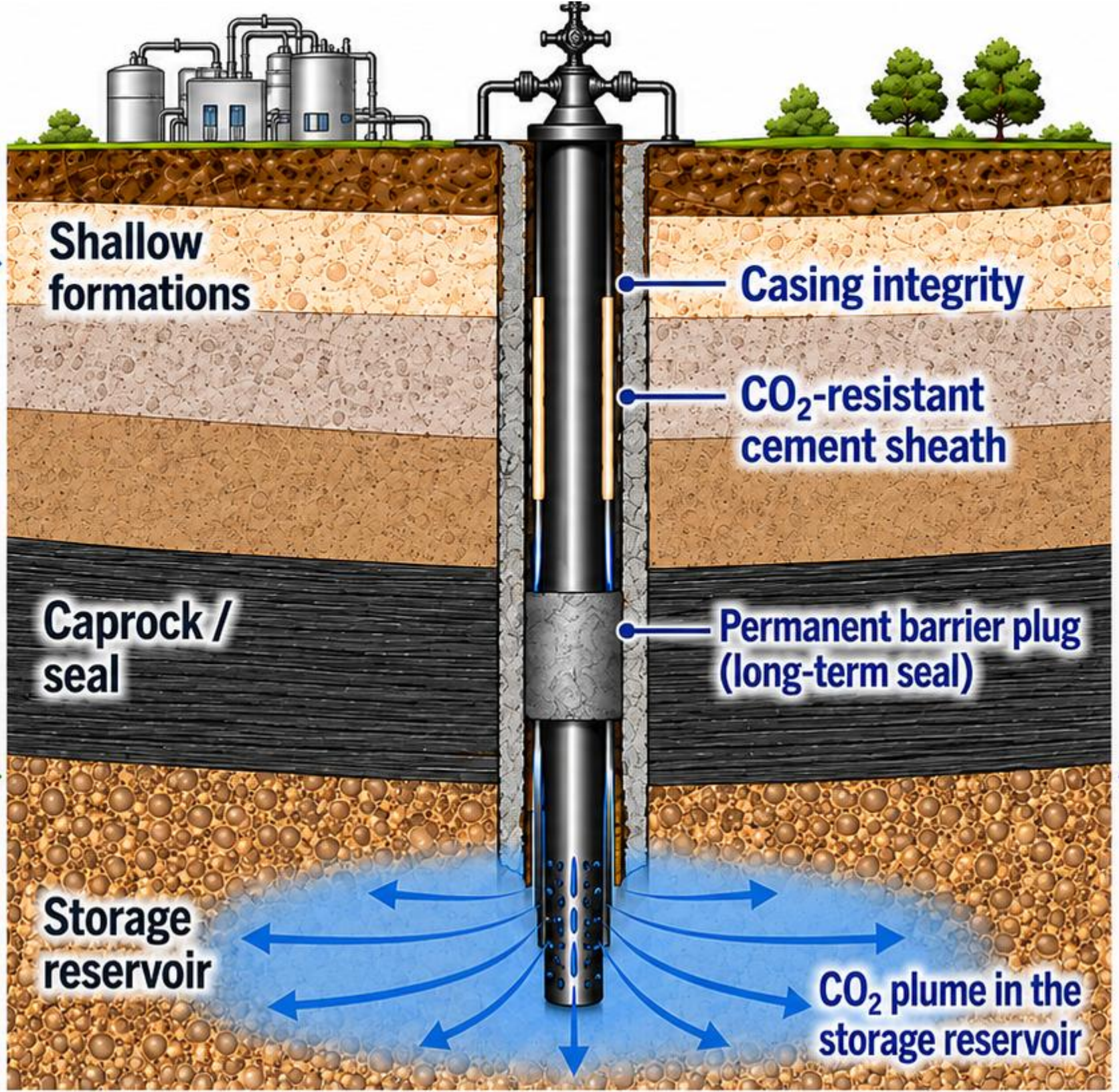
# Abandonment Challenges and Main Risk Mechanisms



Source: Adapted from Shuck, Davis and Diller (2025).

# Mitigation Strategies for CO<sub>2</sub> Well Abandonment

 1. Pre-abandonment Diagnosis



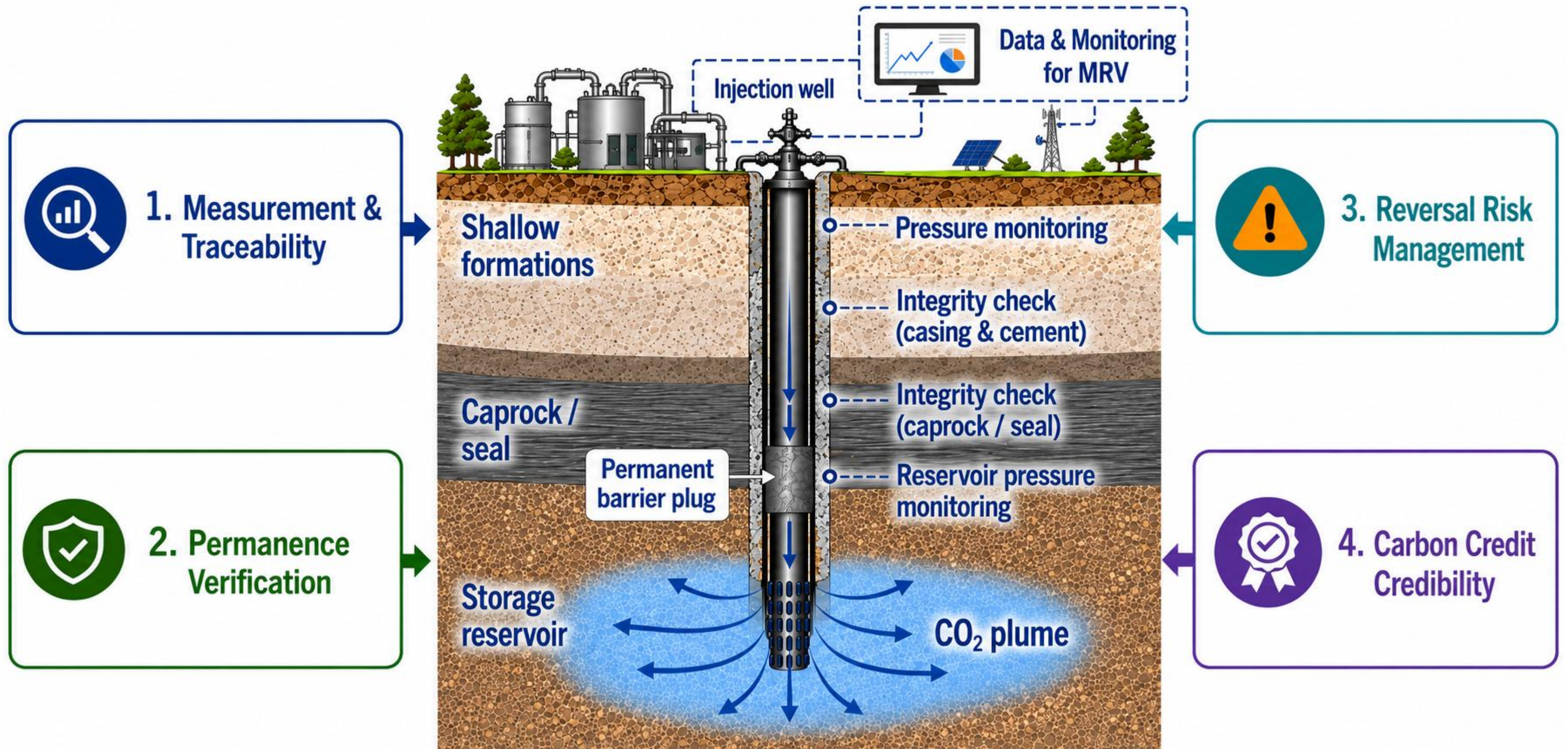
 3. Integrity Verification

 2. Long-term Barrier Design

 4. Post-closure Monitoring

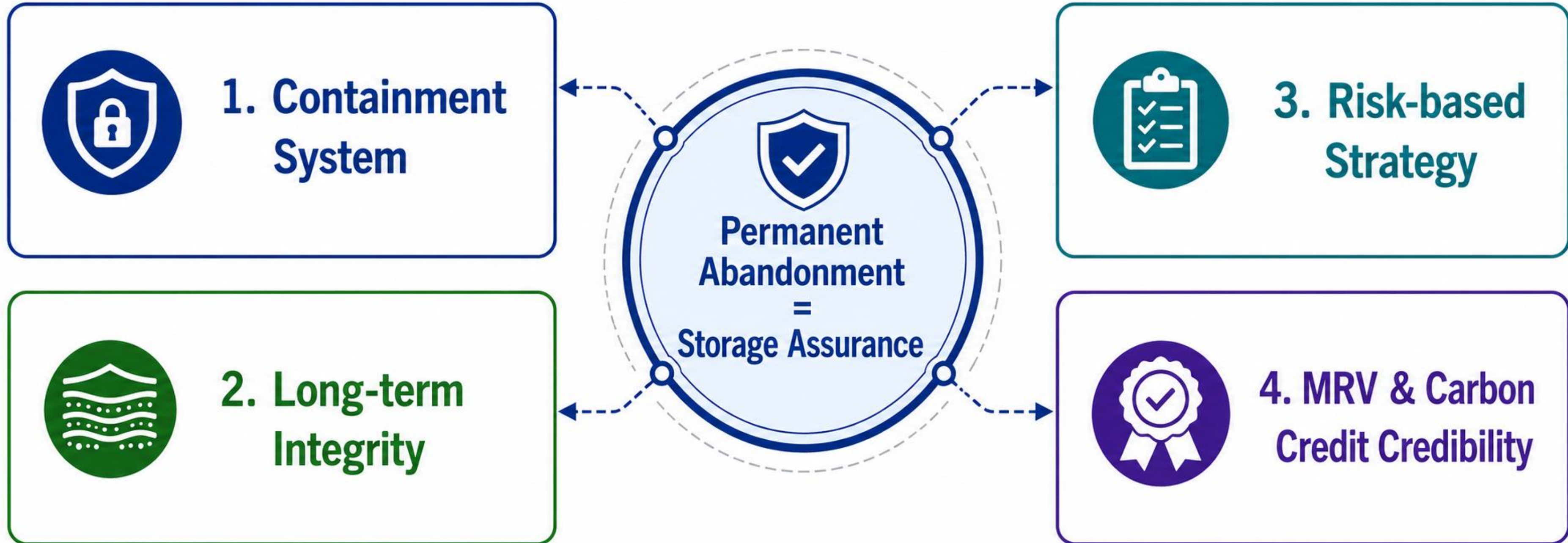
Source: Adapted from Shuck, Davis and Diller (2025).

# MRV, Permanence and Carbon Credits



Source: Adapted from Shuck, Davis and Diller (2025).

**Final Remarks** | Permanent abandonment is essential to prove that carbon removal is real, durable and certifiable.



## References

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\*Figures were conceptually adapted with AI based on the technical references listed above.

**Thank You!**  
**Questions?**



**LABAP**

LABORATÓRIO DE APLICAÇÕES EM PETRÓLEO E BIOCMBUSTÍVEIS



Presented by Maria Fernanda Salomon

*LABAP – Laboratory for Applications in Petroleum and Biofuels*

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