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# **Non-Geological Constraints to Shale Gas/Coal-Bed Methane Production in Vietnam**

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## ▪ **Standard legal framework**

- CBM is petroleum
- CBM is included in key energy policy documents

## ▪ **Clear procedure to issue legal documents**

- Towards a “socialist rule of law” State
- Increasing role for the National Assembly

## ▪ **Comprehensive regulatory framework for the energy sector**

- Increasing role for the Ministry of Industry and Trade (MOIT)

## ▪ **Flexibility in implementation**

- The Prime Minister can decide
- An attitude for flexibility in pursuing the results

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- **No specific legal documents for unconventional gas**
  - Shale gas is not mentioned
  - No regulations for waste water from unconventional gas
- **Evolving energy market**
  - Regulatory functions transferred from PetroVietnam to MOIT
- **PSC regime**
  - The default contract form
  - Strict commitments and implementation
- **Land disputes**
  - Land law where “all people” ownership applies
- **Bureaucracy:**
  - The issue with rational and rules, without incentives

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- **Convenient location and flat topography**
  - Thai Binh is close to the capital and nearby industrial cities
  - Mostly agricultural land, quickly available for site construction
- **Abundant water resource**
  - Extensive river network
  - High rainfall records
- **Experience with oil and gas activities for Thai Binh province**
  - Local authorities: know the industry and related processes
  - Local people: used to oil and gas men and equipments
- **Decentralisation and local government:**
  - Democratic centralism: unified actions with the Central Government

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## ▪ Land disputes at local level

- Time-consuming process to acquire land
- Many stakeholders: from province to village level authorities, and local land owners

## ▪ Possible conflicts with coal miners

- Risks from underground coal gasification

## ▪ Local energy market challenges

- Local gas demand: mostly industrial users, no planned gas-fired power plant
- Infrastructure: limited pipeline networks

## ▪ Environmental risks

- Rice production key for Thai Binh: of national importance
- Risks to irrigation water
- Risks to tourism industry (as in Quang Ninh)
- Flooding risks

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	Supports	Constraints
Geology, geography and information	<ul style="list-style-type: none"> <li>- Flat topography &amp; abundant water resource</li> <li>- Free access to geological information (limited time for new investors, full access for contracted ones), PVN approval</li> </ul>	<ul style="list-style-type: none"> <li>- Mostly open coal mine, little data for deep layers</li> <li>- Few onshore drillings</li> </ul>
Access to land and shale gas resource	<ul style="list-style-type: none"> <li>- “All people ownership” represented by the State</li> <li>- Low cost for agricultural land</li> </ul>	<ul style="list-style-type: none"> <li>- Complicated issue, with complaints and unrests</li> <li>- Local authorities’ discretion</li> <li>- Land owners’ demanding requests</li> </ul>
Rapid drilling	-	<ul style="list-style-type: none"> <li>- Limited capacity from local service providers</li> <li>- Poor infrastructure and challenges in equipment mobilisation</li> </ul>



	Supports	Constraints
Economic incentives & other government support	<ul style="list-style-type: none"> <li>- Encouraged investment projects (contract duration, cost gas limits, corporate income tax)</li> </ul>	<ul style="list-style-type: none"> <li>- Gas price: lengthy negotiation process, low power tariff</li> <li>- Relatively high service cost from local companies</li> </ul>
Market and regulatory environment	<ul style="list-style-type: none"> <li>- High priority for energy security</li> <li>- CBM specified Petroleum Development Planning</li> <li>- Set of Environment Protection and Water Resource Laws</li> </ul>	<ul style="list-style-type: none"> <li>- Under-developed gas market in the North, with limited pipeline network</li> <li>- PSC regimes: extension, pilot production, relinquishment, domestic market obligation, procurements, termination</li> <li>- No specific regulation for waste water from unconventional gas production</li> <li>- Investment environment stability</li> </ul>



- **No specific targets for unconventional gas production**
  - Depending on results from the first shale gas project (Mitra)
  - More geological information to come after Mitra project and ENI studies
  - Nearby offshore gas and related infrastructure: can be both supports and constraints
- **To improve the outlook**
  - Added incentives for the PSC
  - Improvements in gas price (and power tariff)
  - Investment in gas infrastructure
  - Properly-functioning land market
- **The risks**
  - Adverse impacts on rice production: and consequent opposition
  - Huge discovery in conventional gas
  - Slower economy and gas demand growth

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**THANK YOU**



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