The Auditor-General provides assurance to Parliament on the accountability and performance of the Victorian Public Sector.

The Auditor-General conducts financial audits and performance audits, and reports on the results of these audits to Parliament.

On 19 August 2015, the Auditor-General tabled his performance audit report, Unconventional Gas: Managing Risks and Impacts.
The audit assessed whether Victoria was prepared to manage the challenges of unconventional gas, or UCG, should the government lift the moratorium.

We found:

- The risks and impacts of UCG in Victoria have not been comprehensively identified or assessed.
- There are major problems in applying the regulatory system to manage the risks and impacts.
- If a UCG industry goes ahead, Victoria needs to implement the leading practices that other jurisdictions have identified for managing these risks and impacts.
UCG refers to underground sources of natural gas. Based on its location, it is identified as coal seam gas (CSG), tight gas or shale gas.

Hydraulic fracturing is often required to release UCG from the rock layers. It involves pumping water, chemicals and sand into a gas well under high pressure to fracture the rock and release the gas.

It is always needed for shale and tight gas and sometimes for CSG.

CSG also requires a lot of underground water to be extracted before the gas can be released.

The scale of risks posed by UCG is greater than that posed by other gas and mining activities.

It requires more drilling, at more sites, often in areas that underlie existing land uses, particularly agricultural land in Victoria.
Although UCG exploration activities were approved in Victoria in the early 2000s in both the Otway and Gippsland basins, commercial production has not occurred, for several reasons.

- The exact location, extent and commercial feasibility of these resources is still uncertain.
- Victoria already has access to conventional gas from large offshore reserves. And,
- More recently, the moratorium on many UCG activities has dampened industry’s interest.
The audit examined whether Victoria is well placed to respond to the potential environmental and community risks and impacts of UCG activities in the event the moratorium is lifted. It looked at:

- what is known about the risks and impacts and how these have been addressed
- how effectively the existing regulatory framework has been applied to activities, and
- what opportunities there are to improve the regulatory system.

The audit assessed the activities of two departments, the Department of Economic Development, Jobs, Transport & Resources (DEDJTR) and the Department of Environment, Land, Water and Planning (DELWP).
There are significant challenges in developing a sustainable UCG industry, including potential environmental and social impacts and land use conflicts.

They apply across the lifecycle of gas development, from exploration to decommissioning and aftercare. Numerous scientific reviews indicate these risks can be managed if an appropriate regulatory system is in place and administered well.

DEDJTR has not comprehensively assessed the risks associated with UCG activities in Victoria.

Until 2012, its identification of risks was informal and ad hoc—it assumed these could be regulated using the existing system.

Since 2012 DEDJTR has made good progress in identifying and assessing the key risks to water resources and community concerns around UCG activities.

But other important gaps still exist.

DEDJTR, in partnership with DELWP, needs to develop a risk-based strategy which transparently documents its approach to address this issue.
The regulatory system is not yet ready to manage UCG activities.

It does not address the distinct risks and impacts that these activities pose, particularly large scale and cumulative impacts and potential land use conflicts.

DEDJTR’s approval of UCG activities has not been risk based, nor has it effectively overseen industry’s compliance with regulatory requirements. For example, it did not identify or target specific risks through its inspection and audit programs and has not implemented the recommendations of our 2012 compliance audit.

Compliance issues that it has identified have included poor rehabilitation, failure of fire controls and aquifer breaching. None of which led to any penalties or a review or change to its approach to regulating these activities.

DEDJTR is working to address some of these issues, but needs a suite of reforms to improve regulation and its oversight of environmental performance.
There are opportunities for DEDJTR and DELWP to improve the early identification of sustainable areas for UCG activities and the regulation of these, should an industry proceed.

Most importantly, there is currently no land use planning to determine whether extracting gas in a particular location will sustainably meet community needs and safeguard the priority economic, environmental and social values.

DELWP and DEDJTR need to make sure these assessments are made before any areas are released for exploration. There are also no mandatory environmental and social impact assessment processes, instead they are at the relevant Minister’s discretion.

Rights of landowners and other affected parties are not fair and just. Compensation is limited compared to other states, and does not extend to affected communities.

Community consultation obligations are also inadequate. This can have a disengaging effect upon the community.

DEDJTR, in consultation with DELWP, needs to improve land use decision-making to identify sustainable UCG development areas prior to granting any licences.

The following slide shows the steps that such an approach may take.
Opportunities exist to improve planning and regulation – continued

Please refer to section 4.3 (pages 52-58) of our report for discussion of this approach.
The Auditor-General has made 14 recommendations:

- Action on two of these is needed to inform the government’s decision about the moratorium.
- Nine are only required if the moratorium is lifted.
- There are three that will benefit the regulation and management of all earth resources activities.

The recommendations also address four themes:

1. The first is about developing a transparent and co-ordinated risk-based approach to identify and assess the key risks and potential impacts associated with UCG and determine whether these can be managed in Victoria using best practice controls.

2. The second is about reforming the regulatory system by incorporating leading practices to address the risks specifically posed by UCG activities, as well as other improvements that will result in best practice risk-based management of all earth resources activities.
3. The third theme is about DEDJTR needing to **improve its approach and oversight as a regulator.**
4. The final theme is about **identifying sustainable areas for UCG development**, and doing this early.

DELWP and DEDJTR need to develop a land use plan and mandatory impact assessment processes, based on a more comprehensive strategic resource assessment.

DEDJTR will also need to improve the information it provides industry if it releases any areas for unconventional gas development.
This slide summarises the key messages from the audit and the key items that need to change for effective management of UCG activities should the moratorium be lifted.

**Key messages**

**DEDJTR needs to develop a risk-based strategy to identify and assess all key risks and impacts.**

**The current regulatory system is inadequate and needs to be strengthened and reformed.**

**Land-use decision-making processes and community engagement need to be improved and impact assessments mandated.**
Overall message

Victoria is not yet in a position to manage the risks and impacts associated with the development of UCG.

In summary, Victoria is not yet in a position to manage the risks and impacts associated with the development of UCG.
Previous related audits are listed on this slide.

- Managing Landfills (2014)
- Effectiveness of Compliance Activities: Departments of Primary Industries and Sustainability and Environment (2012)
- Managing Contaminated Sites (2011)
All our reports are available on our website.

If you have any questions about this or other reports, or if you have anything else you would like to discuss with us including ideas for future audit topics, please call us on 03 8601 7000 or contact us via our website.
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