

# **Nirvana Regulation for Petroleum Operations\***

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## **Abstract**

Simultaneously meeting the expectations of both the public and business is no mean feat. Environmentally sustainable development (ESD) must be more than a marketing motto. Foundations for trustworthy regulators, regulations, and industrial operations include: - Competent regulators and industry professionals with the capacity to effectively engage with people and enterprises potentially affected by the life-cycle of resource enterprise operations; - Objective-base resource legislation and regulations, wherein the E in ESD means the natural, social, and economic environment so that resource industry regulators have the same outcomes in mind as their co-regulators across governments – consistent with public expectations; - Government agencies that walk the talk when it comes to deploying certainty, openness, transparency, flexibility, practicality, and efficiency; - Engagement is required to happen well before any on-ground operations of any sort become a perceived or actual invasion of sensitivities, and the information provided need be sufficient to inform people and enterprises potentially affected by the relevant regulated activities in a timely manner, to underpin informed points-of-view; - Regulation is contestable anytime, everywhere but without support for vexatious objections to land access; - Fair and expeditious dispute resolution processes prevail with all regulatory decisions ultimately open to resolution in court, and fair compensation is provided to affected land-users; - Proposed activities must meet two criteria – or are not be permitted: (1) significant risks need be reduced to as low as reasonably practical (ALARP) and (2) operations must satisfy community expectations for net outcomes. This latter standard has the general public's interest in mind, not just a few stakeholders. Also, ALARP is inevitably evolutionary; - Project operators regularly reporting on their environmental outcomes, and describe innovation to mitigate any re-occurrence of mishaps, and these become public documents; and - Lead regulatory agencies (or a one-stop-shop approach) serve as an effective way to coordinate co-regulatory decisions in parallel, rather than in series. The presentation will describe the drivers, and the enabling governing frameworks created while aspiring to attain regulatory Nirvana in South Australia.

## **Reference Cited**

Goldstein, B., S. Menpes, A. Hill, A. Wickham, E. Alexander, M. Jarosz, D. Pepicelli, M. Malavazos, K. Staritski, P. Taliangis, J. Coda, D. Hill, and M. Webb, 2012, Roadmap for Unconventional Gas Projects in South Australia: Energy Resources Division, Adelaide SA, 267 p.

# Nirvana Regulation for Petroleum Operations



## Nirvana Outcomes



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# Experience and Regulatory Framework in South Australia

1969

Fracture stimulation has been used safely in South Australia since 1969, in both conventional and unconventional wells.



More than 700\* wells have been fracture stimulated in the deep sandstone reservoirs of South Australia's Cooper Basin.



No fracture stimulation allowed outside the Cooper Basin without detailed assessment to inform stakeholders ahead of consultation.

**45 Years**  
of fracture stimulation  
(fracking) in South Australia

0

Negative impacts identified



Water resources



Soil



Native vegetation and fauna



Landscape and heritage



Air quality



Health and wellbeing of people and enterprise

South Australia has a **BAN** on all oil, gas, geothermal energy and gas (including greenhouse) gas storage operations **UNTIL** potentially significant risks, risk mitigation strategies and residual risks are established and after **EFFECTIVE CONSULTATION** with potentially affected people, enterprises and organisations under **STATEMENTS OF ENVIRONMENTAL OBJECTIVES (SEOs)** resolve that operations- and region-specific risks are simultaneously reduced to as low as reasonably practical and meet community expectations for net outcomes

Thereafter, SEOs are approved and operators give **NOTICE OF ENTRY (NoE)** with sufficient project details to enable stakeholders to make informed decisions whether or not to object to land access.

Every potentially directly affected person, enterprise and organisation is given **NoE** can be a show-stopper with disputes resolved in court. **~14,500 NoEs since 2000 without a single instance of court proceedings**

# Nirvana Regulation for Petroleum Operations

## What do we want?

- Skilled people to effectively plan, engage with people and safely implement the life-cycle of O&G operations;
- Objective-base regulations to protect potentially significantly natural, social and economic environments – consistent with public expectations for net outcomes;
- Regulators that walk the talk in deploying certainty, openness, transparency, flexibility, practicality and efficiency;
- Engagement before perceived or actual invasion of sensitivities, with information sufficient to effectively inform potentially affected people and enterprises;
- Regulation is contestable anytime, everywhere but without support for vexatious objections to land access;
- Fair compensation is provided to affected land-users

# Nirvana Regulation for Petroleum Operations

## What do we want?

- Fair and expeditious dispute resolution for regulatory decisions with the end-point in court;
- Proposed activities meet two criteria – or not approved:
  1. significant risks reduced to as low as reasonably practical. ALARP is evolutionary;
  2. operations satisfy community expectations for net outcomes;
- Project operators regularly reporting environmental outcomes, and describe innovation to mitigate re-occurrence of mishaps, and these become public documents; and
- Lead regulatory agencies (one-stop-shop) coordinate co-regulatory decisions in parallel (efficient), rather than in series (inefficient).

# **Vision for Nirvana: Centuries of safe, secure, competitive energy supplies that meet community expectations for net outcomes**

## **To reach the vision**

- Simultaneously attain trust with investors and the public
- Gain community consent for (locally) unfamiliar activities  
**BEFORE IT IS PERSONAL** – before approval sought for on ground activities;
- Potentially affected people and enterprises get timely information to enable informed opinions;
- Convene **roundtables** to deliver **roadmaps** for projects to inform: the **PUBLIC, GOVERNMENTS, AND INVESTORS**, - enable/attract welcomed O&G projects.
- South Australia's *Roadmap for Unconventional Gas*

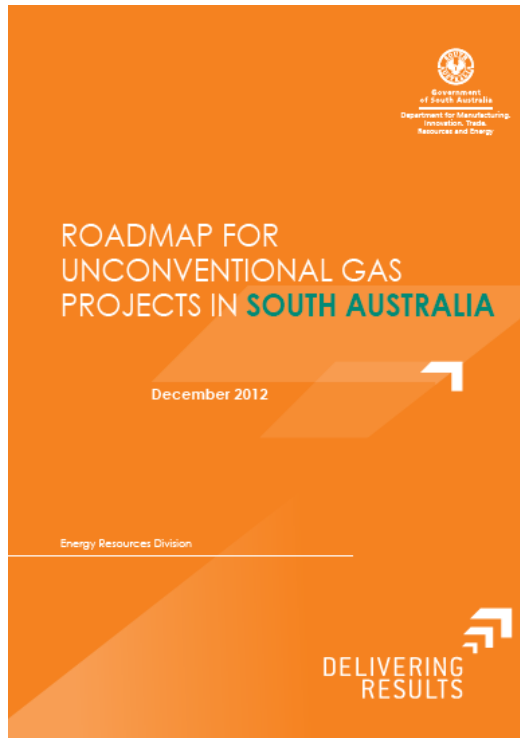


# Roadmap for Unconventional Gas informed by South Australia's Roundtable for Oil and Gas

## Conclusions:

Descend cost & ascend productivity curves to be competition without harm

Regional sharing of costs mitigates the tyranny of distance for remote operations



**Search words:** *DSD & Unconventional Gas*

Informed by a **Roundtable** of: industry; governments; peak bodies for protecting environments and aboriginal people; research institutions & a few individuals. **Now >700 members**

Now the **Roundtable for Oil and Gas Projects** with **8 working groups** to inform potentially affected people and enterprises while enabling cooperation amongst competitors.

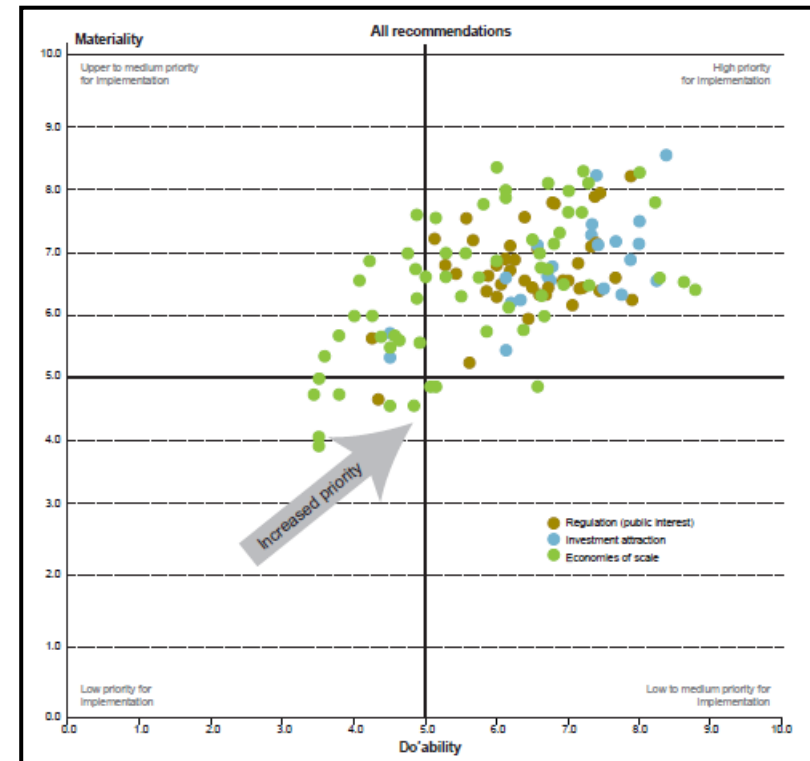
## Strategic actions:

- Demonstrate where the net present value of cooperation (JVs for JVs) exceeds the value of go-it-alone planning / investment;
- Local businesses given a 'heads-up' to use competence to build capacity to compete (local skin in the game)

# Priorities to foster sustainable, profitable projects - Feedback from Roundtable / Roadmap for Oil & Gas

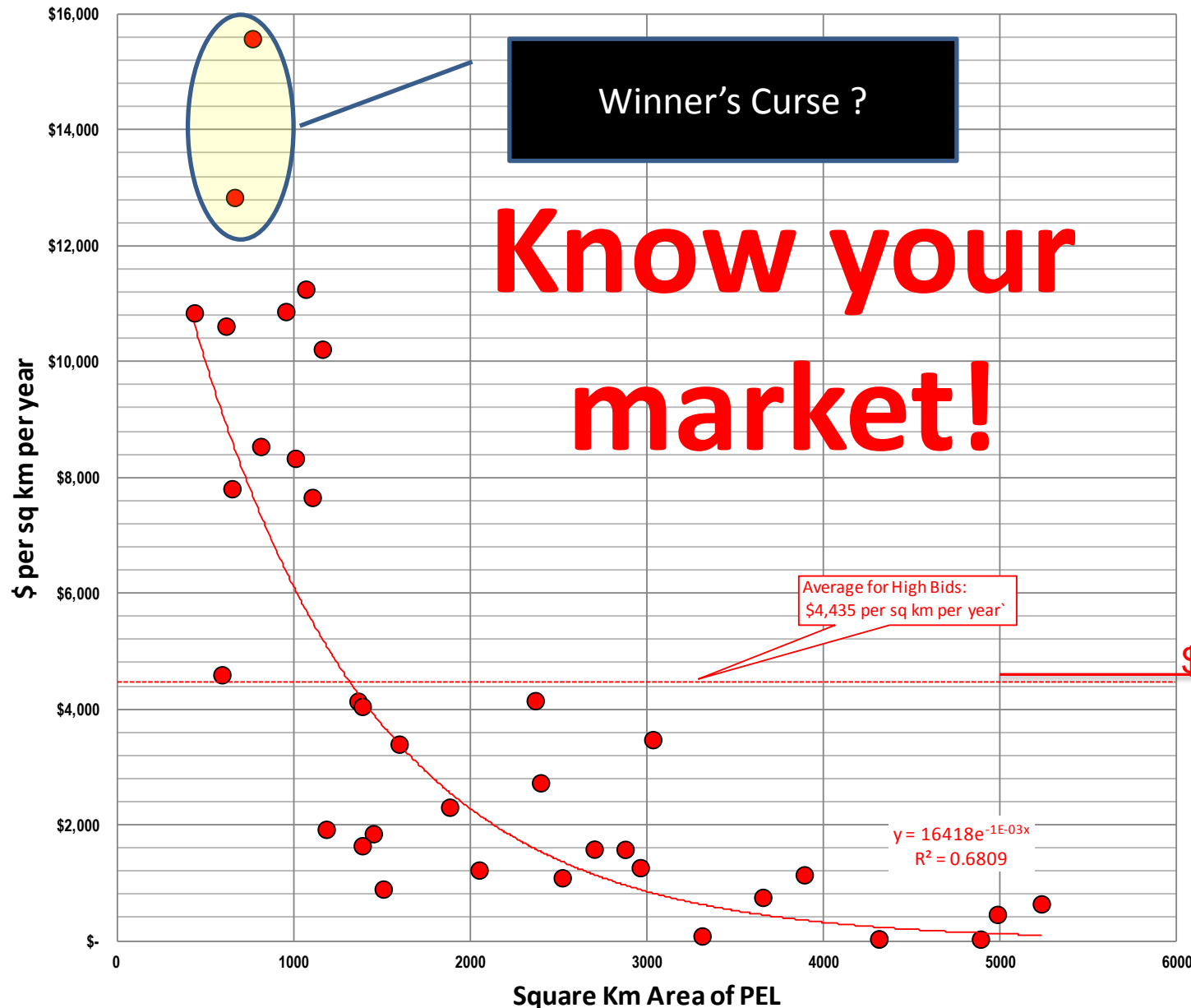
## Top priorities:

- Legal frameworks provide certainty and simultaneously meet community and investor expectations for outcomes
- Trustworthy, people implement and regulate projects
- Environmental sustainability
- Manage supply-chain risks (people and facilities)
- Bolster understanding of risks, risk management and rewards





# Top Ranked Roadmap Recommendation – Fit-for-Purpose Petroleum Licences and Tenure



- Market benchmarks (bids/farm-ins) define contestability
- State get's a multiple of exploration + appraisal investment while industry gets secure tenure on regional plays
- Development costs in eligible expenditure tallies for PRLs when the price for Brent falls below A\$70/barrel

\$4,500 / km<sup>2</sup> pa

# Fact checked answers to FAQs

- FAQ Sheet – Unconventional Gas and Oil in the South East of South Australia  
[http://www.pir.sa.gov.au/\\_data/assets/pdf\\_file/0003/218109/FAQ - South East Unconventional Gas and Oil.pdf](http://www.pir.sa.gov.au/_data/assets/pdf_file/0003/218109/FAQ_-_South_East_Unconventional_Gas_and_Oil.pdf)
- Whole-of-government submission to South Australian Natural Resource Committee Inquiry Into Unconventional Gas (Fracking)  
[http://www.petroleum.dmitre.sa.gov.au/\\_data/assets/pdf\\_file/0009/240120/Inquiry\\_into\\_Unconventional\\_Gas\\_Fracking.pdf](http://www.petroleum.dmitre.sa.gov.au/_data/assets/pdf_file/0009/240120/Inquiry_into_Unconventional_Gas_Fracking.pdf)

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