
3 What is an unnecessary regulatory burden?

Key points

- Governments regulate the upstream petroleum sector to define property rights, address spillovers and information gaps, and address concerns about monopoly infrastructure.
- Good regulatory design is important to minimise unnecessary burdens on business and the community. Best practice regulation maximises net benefits to the community by imposing the lowest burden necessary to achieve the policy goals underlying the regulation.
- The potential for unnecessary regulatory burdens can arise from problems with regulations themselves, poor enforcement or administration, and unnecessary duplication and inconsistency.
- The compliance costs associated with regulation and regulatory uncertainty can reduce investor returns and increase risk, reducing the incentive to invest in upstream petroleum projects, especially if regulatory requirements are seen as less onerous in other countries.
- Unnecessary compliance costs and delays add to the already significant barriers to entry for small- to medium-sized businesses, reducing competitive pressures and potentially innovation in the sector.

As noted in chapter 1, this study focuses on ‘unnecessary’ burdens that signify deviation from best practice regulation. This chapter discusses what constitutes an unnecessary regulatory burden, and how such burdens can be prevented.

3.1 Why regulate the upstream petroleum sector?

Government regulation of industry is ideally designed to address perceived market failures in a way that maximises net community benefits (box 3.1). Rationales generally relate to ‘public good’ characteristics, externalities, information problems or concerns about monopoly infrastructure (PC 2001a). All these apply in the upstream petroleum sector.

Box 3.1 Rationales for government regulation

Public goods exist where provision for one person means the product is available to others at no additional cost. Public goods are characterised by being non-rivalrous in consumption (that is, consumption by one person will not diminish consumption by others) and non-excludable (that is, it is difficult to exclude people from benefiting from the good). Given that exclusion would be physically impossible or economically infeasible, the private market is unlikely to provide these goods to a sufficient extent. The nature of public goods makes it difficult to assess the extent of demand for them. Common examples include flood-control dams, national defence and street lights.

Externalities or **spillovers** occur where an activity or transaction has positive or negative effects on others who are not direct parties to the transaction and these effects are not fully accounted for in the transaction outcome. An example of a positive spillover is disease immunisation, which protects the individual, while also lowering the risk of disease for the rest of the community. Governments often subsidise activities that have significant positive spillovers. Negative spillovers may include pollution, or a large building that blocks sunlight to its neighbours.

Public goods and spillovers are similar analytically — spillovers have public good characteristics in that they are non-rivalrous and non-excludable (Brown and Jackson 1990).

Information failures occur where there is insufficient or inadequate information about matters such as price, quality and availability for businesses, investors and consumers to make informed decisions. In some instances, markets can address these problems through intermediary products (for example, advisory services). But where the issues are highly technical, government may perceive a role to complement or verify market-supplied information — for example, providing information to employers in the area of occupational health and safety, and licensing, registration and labelling regulations for chemicals and pharmaceuticals.

Natural monopoly occurs where it is more efficient for one business to supply all of a market's needs than it would be for two or more businesses to do so. It arises where there are significant economies of scale resulting from fixed costs that are large relative to the variable costs of supply. Regulation or government ownership is often adopted to avoid excessive pricing that can arise from monopoly provision. Regulation to allow third-party access is sometimes used to promote competition in areas characterised by infrastructure monopolies.

Sources: Brown and Jackson (1990); Adapted from PC (2001a).

- For example, the information obtained from petroleum exploration has *public good* characteristics, and incentives to undertake exploration would be poor if other companies could 'free ride' off those who made initial discoveries. One response to this problem is for governments to establish a system of property rights, such as exclusive retention or exploration licences for particular areas (possibly following a competitive bidding process) (PC 2001a). Governments

may also need to regulate to deal with disputes relating to property rights, such as to clarify ownership when resources are found on land owned by private individuals, or on land subject to native title.

- Examples of possible *externalities* (or spillovers) relating to upstream petroleum would be pollution or environmental damage, damage to heritage places, or threats to public and/ or employee safety.
- To deal with *information problems*, governments typically provide maps and data to upstream petroleum businesses to assist with exploration, and often require provision of data about exploration activities or oil and gas discoveries. The public good nature of much of this information makes governments more likely to regulate on this basis.
- *Natural monopoly* concerns could apply to upstream petroleum assets such as pipelines, and — where specific exemptions from access claims do not apply — they may be subject to third-party access provisions.

Even where market failure is not present, governments sometimes regulate to change market outcomes. For example, resource management regulation is said to be intended to maximise the return to Australia on its petroleum resources (ownership of which is vested in the Crown). Governments typically seek to influence rates of exploration, and subsequent development and production (Hossain 1979). As Tina Hunter observed:

A major objective for Australia is to increase petroleum production to ensure that it does not have [to] continue to import high levels of petroleum to meet domestic energy needs. To meet this objective, Australia needs to recover the greatest amount of petroleum as possible, since the greater the recovery of resources, the greater the economic contribution of the petroleum sector to Australia. This concept, known as value creation, means that the extraction of petroleum resources are directed by the State to ensure that the greatest value and benefit of the petroleum resources are extracted for the benefit of society. (sub. DR28, pp. 2–3)

Where there are differences between government perceptions of the national interest and the commercial interests of petroleum companies, government demands may conflict with the commercial imperatives of the companies. In particular it is not always the case that the greater the recovery of resources the greater the economic contribution to either Australia or to the company concerned. Increasing recoveries beyond a certain point may be technically or theoretically possible but, from an economic perspective, the additional resources gained may not justify the expenditure involved. The costs of recovery may exceed the benefits. This issue is discussed in chapter 5.

Governments may also regulate to ensure ongoing provision of services seen as especially important to the community (often labelled ‘essential services’). In the

event of shortages, this regulation may take the form of rationing. Western Australia has a policy that up to the equivalent of 15 per cent of liquefied natural gas production for export gas projects in that State should be provided to the domestic market. (Currently, average domestic gas prices, excluding transport costs, are significantly lower than those prevailing for export liquefied natural gas). While such policies may be in the short-term interests of domestic gas consumers, pipeline owners and retailers, they could represent a disincentive to invest in gas reserves by limiting potential returns. This issue is further discussed in chapter 5.

The other major area of regulation affecting the upstream petroleum sector is occupational health and safety (OHS). OHS regulation seeks to safeguard the health, safety and welfare of workers and the general public, thereby reducing the personal and economic costs of work-related fatalities, injuries and illnesses (PC 2004b). While employers would have an incentive to provide a duty of care to employees in the absence of regulation, this is considered unlikely to be sufficient in all cases to ensure levels of safety that meet community expectations. Weaknesses in the common law system mean that governments generally consider this to also be inadequate in ensuring adequate levels of safety (PC 2008b). Governments may also provide information to employers on OHS issues.

3.2 Sources of potential unnecessary regulatory burdens

The potential for unnecessary regulatory burdens arises from a number of sources. However, they can typically be categorised under three broad headings: (1) problems with regulations themselves, (2) poor enforcement and administration, and (3) unnecessary duplication and inconsistency.

Problems with regulations themselves

Regulations can unnecessarily increase regulatory burdens in several ways:

- *Unclear or questionable objectives*: a lack of clarity provides uncertainty about what is expected of both those being regulated and those regulating. Moreover, it increases the potential for regulators to use their own discretion in determining the intent and priorities of legislators and can lead to inconsistency between regulators interpreting the same piece of legislation. Regulatory uncertainty acts as a disincentive to invest, as well as potentially increasing compliance costs.
- *Conflicting objectives*: sometimes regulations (possibly enforced by different regulators) can have objectives that are conflicting. Examples might include

safety considerations, that suggest generous spacing, and environmental regulations that seek to minimise a facility's 'footprint' and hence its environmental impact.

- *Overly complex regulation*: complex laws are likely to require legal interpretation and therefore compliance is more costly and more time consuming. They also make it harder to determine the expectations of regulators.
- *Excessively prescriptive regulation*: prescriptive regulation is typically more complex and onerous than objective- or performance-based regulation, is less flexible, can stifle innovation, and may not allow businesses to deliver the policy outcome at least cost.
- *Redundant regulation*: regulation may remain in force despite being overtaken by changed circumstances. While providing no benefits, such regulation will still involve compliance costs and could overlap with more recent legislation, causing regulatory confusion.
- *Regulatory creep*: regulations that influence more areas and activities than were originally intended or warranted. This can stem from the use of subordinate legislation, and regulatory guidelines.

Poor enforcement and administration

Poor enforcement and administration of regulation can arise from a number of sources:

- *Excessive reporting or recording requirements*: requirements beyond the minimum required to enforce a regulation unnecessarily increase compliance costs.
- *Inadequate resourcing of regulators (including inexperience or lack of expertise)*: can delay the time taken for approvals, and potentially lead to poor regulatory decisions. It can also prompt regulators to seek additional, and potentially spurious, information because of a lack of experience or expertise, or to circumvent statutory time limits (where such limits exist).
- *Overzealous regulation*: can increase compliance costs and represents a disincentive to investment. Inadequate resourcing of regulators can lead to problems, but over-resourcing can also, if it results in imposing excessive regulation or micro-management of regulated businesses.
- *Regulatory bias or capture*: regulators may be 'captured' by particular interests that they deal with on a regular basis, and therefore make decisions favourable to those interests. Such interests could include the businesses being regulated (or a

particular business or businesses), or lobby groups such as environmental or community groups.

Unnecessary duplication and inconsistency

Regulatory duplication and inconsistency between jurisdictions is not inherently bad. It may stem from different circumstances between jurisdictions and, from a competitive federalism perspective, can lead to better overall outcomes. However, duplication and inconsistency can impose some costs:

- *Duplication of regulation*: the need to provide information to multiple regulators and go through multiple processes can add unnecessarily to compliance costs. The existence of multiple regulators also creates incentives for ‘forum shopping’, where participants may seek the forum in which they are most likely to obtain a favourable outcome. Further, it can create uncertainties regarding the boundaries of responsibility for each regulator. On the other hand, as discussed in chapter 9, regulatory duplication can also be seen as a desirable outcome of intergovernmental competition.
- *Inconsistency of regulation*: regulatory inconsistencies can occur within or across jurisdictions, and increase regulatory burdens. Inconsistency is likely to present particular problems for businesses operating in multiple jurisdictions.
- *Variation in definitions and reporting requirements*: variation can occur between regulators within jurisdictions, although it is typically a more significant problem for businesses operating in multiple jurisdictions. Such variation can increase compliance costs.

3.3 What is best practice regulation?

The overarching objective of regulation should be to achieve desired outcomes more efficiently than would be achieved by alternatives, including no regulation (PC 2002). In promoting government objectives, most regulation will also impose costs. The focus of this study is on *unnecessary* burdens. Best practice regulation imposes the least burden necessary to achieve the underlying policy goals, bringing the greatest possible net benefit to the community.

In its 2006 report *Rethinking Regulation*, the Regulatory Taskforce enunciated six principles of good regulatory practice (box 3.2), noting that the regulatory burden imposed by government would be reduced were the principles followed. The Australian Government has subsequently endorsed these principles (Australian Government 2006).

Box 3.2 Principles of good regulatory practice

Six principles of good regulatory practice were enunciated by the Regulatory Taskforce in its 2006 report:

- Governments should not act to address ‘problems’ through regulation unless a case for action has been clearly established. This should include evaluating and explaining why existing measures are not sufficient to deal with an issue.
- A range of feasible policy options — including self-regulatory and co-regulatory approaches — needs to be assessed within a benefit–cost framework, including analysis of compliance costs and, where relevant, risk.
- Only the option that generates the greatest net benefit for the community, taking into account all the effects, should be adopted.
- Effective guidance should be provided to regulators and regulated parties to ensure that the policy intent of the regulation is clear, as well as what is needed to be compliant.
- Mechanisms such as sunset clauses or periodic reviews need to be built in to legislation to ensure that regulation remains relevant and effective over time.
- There needs to be effective consultation with regulated parties at the key stages of regulation-making and administration.

Source: Regulation Taskforce (2006).

Good regulatory design

Good design of regulations is important to minimise unnecessary burdens on business and the community. Elements of good regulatory design relate to:

- clarifying objectives
- simplifying regulation
- reducing levels of prescription (unless this is necessary to clarify requirements or provide certainty about compliance, thereby potentially reducing unnecessary burdens)
- minimising reference to subordinate legislation
- minimising unnecessary inconsistencies between jurisdictions
- including review mechanisms
- completing regulatory impact statements (RISs)
- including sunset clauses — a sunset clause is likely to trigger a review or termination of a regulation, which may reduce unnecessary burdens (PC 2007b).

Regulatory impact statements and ‘good’ process

Since 1997, the Australian Government has mandated the preparation of RISs for significant regulation potentially affecting businesses or restricting competition. The RISs are prepared by the departments or agencies developing regulation, with compliance monitored by the Office of Best Practice Regulation. Some State and Territory Governments also mandate similar procedures.

The RIS process is designed to bring together key elements of good regulatory practice. The RIS should cover the problem or issue being dealt with, the objective of government in dealing with the issue, and a range of feasible options. There should be benefit–cost (box 3.3), impact and risk analyses for each option, together with justification for the preferred option. The RIS should also summarise the consultation process and feedback received, and address how the regulation will be implemented and what review mechanisms are in place (Regulatory Taskforce 2006).

Box 3.3 Importance of benefit–cost analysis

The use of benefit–cost analysis is an important part of the regulatory impact statement process. A proper benefit–cost analysis should account for all the effects of a regulatory proposal on the community and economy (not just direct or easily quantifiable effects). Benefit–cost analysis involves valuing the gains and losses relating to a regulatory proposal in monetary terms. Where the benefits exceed the costs, this suggests the regulatory proposal would bring net benefits to the community.

Benefit–cost analysis is an important part of the regulatory assessment process because it:

- provides decision makers with quantitative information about the likely effects of a regulatory proposal
- encourages decision makers to take account of all the positive and negative effects of a regulatory proposal, and discourages them from making decisions based only on the impact on a single group within the community
- quantifies the impact of regulatory proposals in a standard manner, thereby promoting comparability, and encouraging consistent decision making
- captures the various links between the regulatory proposal and other sectors of the economy
- helps discover cost-effective solutions to policy problems by identifying and measuring all costs
- makes clear and transparent the assumptions and judgments made in those instances where it is difficult to quantify some costs or benefits with precision (Australian Government 2007).

Good regulatory design is important to minimise unnecessary burdens on business and the community. Unnecessary regulatory burdens can potentially arise from problems with regulations themselves, poor enforcement or administration, and unnecessary duplication and inconsistency. Best practice regulation imposes the least burden necessary to achieve the policy goals underlying the regulation, bringing the greatest possible net benefit to the community.

3.4 Objective-based regulation versus prescriptive regulation

Recent years have seen a general trend away from prescriptive regulation towards objective-based regulation. This means that governments have moved away from prescribing specific standards or procedures and, instead, have emphasised achievement of the objectives of legislation, leaving it to businesses to determine how objectives are to be achieved. Regulation of the upstream petroleum sector has, at least in part, followed this trend.

There have been two main drivers of this trend. First, in industries subject to rapid technological change, prescriptive regulation is likely to become quickly outdated, potentially becoming counterproductive in achieving greater safety or efficiency. Second, particularly in the area of OHS, there has been acceptance that where governments attempt to specify (through prescriptive legislation) appropriate measures to minimise risk, the government effectively accepts the role of risk minimisation for itself. Governments generally, including in Australia, see responsibility for risk minimisation as residing with businesses (DISR 2001).

There are, however, circumstances where prescriptive requirements or rules are unavoidable, or where prescription will reduce regulatory burdens by providing businesses with certainty about what they are required to do. Ultimately therefore, as noted by the Regulatory Taskforce (2006), the appropriate degree of prescription in legislative standards is a matter for assessment based on evidence and analysis.

Objective-based legislation inevitably leaves room for discretion by regulators, therefore potentially creating regulatory uncertainty. This problem can be somewhat alleviated by including objects clauses in legislation or clearly defining the objectives in an explanatory memorandum. This should tell regulators what balance is sought between conflicting objectives, and provide guidance on how this balance is to be achieved.

3.5 Costs of regulation

The major costs associated with regulation can be categorised as compliance costs (including the administrative costs to government); lobbying or ‘gaming’ costs; the costs of price distortions leading to consumption and production losses; and the related costs associated with potentially ‘lost’, delayed or suboptimal investment (figure 3.1).

Compliance costs

The costs of complying with (and administering) regulation are potentially significant. The compliance costs of regulation to businesses potentially include:

- management and staff time (including diversion of management attention from core business, and hiring of additional staff)
- payments to regulators
- purchase and maintenance of specially modified IT systems
- hiring of external expertise (such as consultants and lawyers)
- training costs.

The burden of these compliance costs falls initially on businesses, potentially reducing returns on investment and, therefore, possibly investment levels (in turn generating lower tax revenue). To the extent that higher costs are passed on to consumers in the form of higher prices or restricted consumer choice, the burden of increased compliance costs falls on consumers. Governments also incur significant costs in designing and enforcing regulation. Compliance costs are minimised when good regulatory practices are followed.

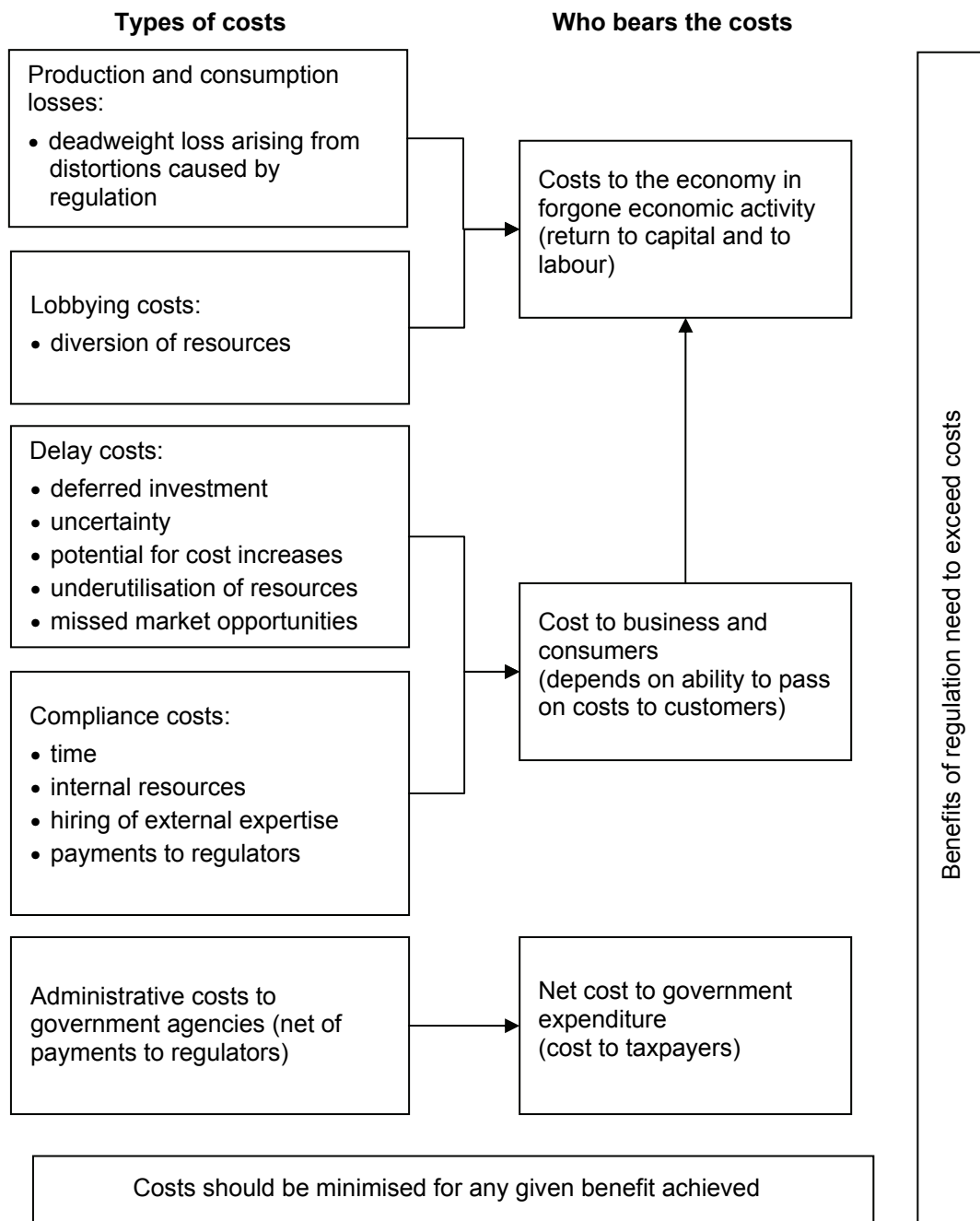
Lobbying costs

A further potential inefficiency stemming from regulation — particularly when regulatory outcomes are uncertain — is the diversion of resources into lobbying activity, both by businesses seeking to invest and other interested parties. The greater the discretion given to regulators, the greater the potential for lobbying activity to be employed in an effort to influence regulatory outcomes (PC 2004d).

In the context of the upstream petroleum sector, Nexus observed:

Whilst regulatory approvals do happen in Australia without undue political interference, they often need guidance and lobbying to ensure they progress through the process in a timely and efficient manner. (sub. 3, p. 3)

Figure 3.1 **Costs of regulation**



Source: Adapted from PC (2008c).

Production and consumption losses

Regulation can potentially lead to price distortions resulting in production or consumption levels deviating from those that would occur in the absence of regulation. If unnecessary regulatory burdens result in increases in the prices of

upstream petroleum products, fewer will be produced or purchased, leading to efficiency losses. As discussed below, these distortions can also lead to reduced investment in the upstream petroleum sector.

Delays and the potential for ‘lost’ investment

The compliance costs and regulatory uncertainty associated with prospective projects can reduce investor returns and increase risk, lowering the attractiveness of upstream petroleum investments and potentially threatening their commercial viability. Costs associated with delays manifest themselves in many ways. Delays result in out-of-pocket expenses and implicit costs associated with deferred or cancelled projects, such as forgone earnings, lost market opportunities (sometimes quite significant as contracts can be of 10 to 15 years duration), the costs of standby financing facilities, and the costs of the funds already invested. These losses are compounded if capital costs are rapidly increasing (as has typically been the case in recent years). Further, project delays limit the availability of cash flows to finance new exploration and development projects.

Apache noted:

The actual monetary cost consequent on regulatory compliance is commonly far less than the cost of delay in [present value] terms to a profitable project. (sub. 14, p. 1)

Similarly, Nexus observed:

It is the time taken to wade through the process and the implications for project financing that is the real cost to a small to medium company, rather than the actual dollars expended in ensuring compliance. (sub. 3, p. 6)

The opportunity cost of projects that are delayed, reconfigured in a suboptimal way, or do not take place, represents one of the key potential costs associated with regulation. Australia’s petroleum sector operates in a globally competitive environment where exploration and development capital is highly mobile. Petroleum exploration involves significant financial risk as it requires significant upfront capital investment, typically with a low likelihood of success in finding commercial oil or gas deposits. Those explorations that are successful are required to both offset the losses associated with failures, and to ensure investors earn an adequate return on capital.

Regulatory delays, or unnecessarily onerous regulatory requirements, reduce the incentive to undertake investment, especially if regulatory requirements are seen as less onerous elsewhere. Apache stated:

Australia competes with all other nations to attract upstream oil and gas investment. At all times, irrespective of the level of oil and gas prices, this competition is fierce.

Governments need to be aware that oil and gas companies factor in the costs and risks associated with the regulatory regime when allocating capital. (sub. 14, p. 2)

FINDING 3.2

The compliance costs associated with regulation, delays and regulatory uncertainty can reduce investor returns and increase risk, thereby reducing the incentive to invest in upstream petroleum projects. This is especially the case if regulatory requirements are seen as less onerous in other comparable countries.

Delay costs are discussed further in chapter 8.

Unnecessary regulatory delays can also impose fiscal costs on governments in two ways. First, production delays lead to reduced tax receipts and royalties. Second, and perhaps more importantly, the tax base could be reduced by under-investment in exploration and commercialisation (as projects that could otherwise have proceeded might not be developed).

Unnecessary compliance costs and delays can act as a deterrent to the entry of small- to medium-sized businesses, which already face high barriers to entry, as well as potentially dissuading foreign investment (by making Australia a less attractive country in which to invest).

APPEA noted:

Small to mid-cap companies rely on ‘first development’ cash flows and delays in project approvals can have an adverse impact on their commerciality. For larger companies, they can refocus their project portfolios, even considering taking investment overseas to meet their corporate aspirations. (sub. 16, p. 15)

While the DomGas Alliance stated:

The current approvals process and stringent demands placed on developments create significant barriers to entry for new players and serve to protect larger incumbent producers. (sub. DR24, p. 2)

FINDING 3.3

Unnecessary compliance costs and delays increase the already high barriers to entry for small- to medium-sized businesses.