

Pricing

The importance of efficiently pricing water services to manage demand is made in Chapter 9. That chapter makes the case for transparent recovery of infrastructure costs through development contributions. This chapter has reinforced the importance of efficiently pricing water connections to ensure that capital and operating costs are recovered so that growth is enabled rather than 'rationed'. This chapter has made specific recommendations with respect to Watercare's pricing of its IGC (R10.1 and R10.2).

Best fit provision

The Commission has recognised that the arrangements for the provision of water services to communities needs to be fit for purpose and recommends careful consideration of costs and benefits in proposals for mergers. The Commission has recommended that when reviewing their arrangements for good quality infrastructure under section 17 of the Local Government Act 2002, councils should consider whether the CCO model offers the potential to capture scale economies in provision (R10.6). Further, the Commission has recommended that the Local Government Act 2002 be amended to provide councils with a greater range of options for providing and managing water services (R10.5). Removal of the current legislative barriers would allow for greater contestability in the management of water services.

Performance monitoring

Consistent and transparent information about the performance of water providers to enable benchmarking would also be a welcome addition to the regulatory framework for water services.

Benchmarking:

- verifies high performance and identifies agencies and service areas that are successful;
- enables agencies to learn from peers that are delivering higher-quality services and/or more cost-effective services; and
- generates additional incentives for agencies and services to improve performance (NZPC, 2013; Steering Committee for the Review of Government Service Provision, 2010).

New Zealand is not alone in having unregulated publicly provided water services. But other countries where water services and infrastructure are delivered by public providers without economic regulation (such as Mexico, the Netherlands and Sweden) have strong self-regulatory institutions and sophisticated benchmarking of performance (Marques, 2010) (Box 10.12).⁵⁰

Box 10.12 International examples of self-regulation of water services

The Netherlands

Water services and wastewater services in the Netherlands are carried out in the public sector – participation of the private sector is prohibited by law. There is no explicit regulation, however VEWIN (the Association of Dutch Water Companies) acts as a quasi-regulator encouraging performance improvement and undertaking benchmarking. VEWIN also surveys customers directly, to evaluate consumer expectations and satisfaction.

Mexico

In Mexico, the National Association of Water and Wastewater Companies (ANEAS) uses benchmarking to encourage better financial and service performance:

The ANEAS, acting in a proactive way and using benchmarking as its main tool, has filled the absence of a sector-specific regulator. (Marques, 2010, p. 268)

⁵⁰ In some cases, benchmarking exercises operate in conjunction with economic regulation. For example, water services and wastewater services in Canada are generally provided by vertically integrated public operators that are subject to rate-of-return regulation. Canada's National Water and Wastewater Benchmarking Initiative was established in 1997 by AECOM (a private infrastructure company) in partnership with several water utilities. The initiative currently publishes benchmarking data for 53 wastewater utilities, 50 water utilities and 28 stormwater management programmes. The data provided by the utilities are confidential; therefore individual data pertaining to specific providers cannot be identified in public reports (NWWBI, 2013).

Sweden

Water services and wastewater services in Sweden are typically managed directly by local municipalities, with some limited participation by private companies. The Swedish Water and Wastewater Association was established by the municipalities in 1962 and plays an important role in promoting a benchmarking system. The benchmarking system focuses primarily on reducing costs and improving efficiency (Marques, 2010).

F10.10

A feature of water services provision in many other countries is the presence of strong self-regulatory institutions, particularly performance benchmarking.

Berg and Marques (2010, p. 18) have reviewed the literature on benchmarking in water services and conclude that the practice has a positive impact:

...18 studies focus on the benefits of using benchmarking to enhance value for money in the provision of water utility services ... As would be expected, all the studies identified a positive impact from using benchmarking practices—whether or not an autonomous regulator was overseeing the sector.

As set out in Box 10.13, benchmarking conducted in the Netherlands has achieved some particularly impressive results.

Box 10.13 Benchmarking water services in the Netherlands

Benchmarking has been conducted among water services providers in The Netherlands since 1989. Initially, benchmarking was conducted among a subset of Dutch water providers, and the results were kept confidential. Since 1997, benchmarking has been conducted at three-yearly intervals by the Association of Dutch Water Companies (VEWIN). Under VEWIN's management the approach to benchmarking changed with nearly all water providers participating in the exercise, and the results being published (attracting widespread attention). In 2010, participation in the benchmarking exercise was made mandatory under the *Drinking Water Act*.

Benchmarks are based around four themes: Water Quality, Service, Environment, and Finance and Efficiency. A range of performance measures have been developed relating to each theme, including an index that expresses the general compliance of drinking water quality with legislated standards; a customer satisfaction survey; the unit prices charged to various customers; and the composition of costs distinguishing between taxes, costs of capital, depreciation and operational costs (Blokland, Schouten & Schwartz, 2009).

The post-1997 benchmarking approach was initially introduced to forestall a government proposal to establish a regulatory regime for water along similar lines to the UK model. Marques (2010, p. 149) notes that benchmarking has prevented the need for stronger forms of regulation:

With its important and proactive role, and using benchmarking as its main tool, the VEWIN has postponed not just explicit economic regulation in this sector, but also privatization, since it has managed to maintain the Dutch water companies at the forefront of excellence at a global level, which limits the potential efficiency gains offered by privatization and regulation.

Braadbaart (2007) has assessed the impact of the Dutch benchmarking, comparing the pre- and post-1997 approaches, and reached the following conclusions.

- Benchmarking, particularly when the results were publicly available, enhanced transparency by enabling boards of governors to better judge the performance of utility managers and enabling customers to judge the effectiveness of their water services providers.

- Benchmarking substantially improved the performance of water service providers, but only after the benchmarking results entered the public domain. Braadbaart (2007) notes two potential explanations for the delay in benchmarking becoming visible in utility performance. First, it could be a result of utility managers taking several years to become accustomed to benchmarking and to learn how to translate the lessons from benchmarking into operational reforms. A second, but not necessarily incompatible, explanation is that utility managers became serious about internal reform only when benchmarking information was publicised.

Numerous other studies have also commented favourably on the Dutch benchmarking system. Marques and De Witt (2010, pp. 45–46) note the “results of this benchmarking were remarkable as the efficiency of the sector increased by 21% between 1997 and 2005”. Blokland, Schouten and Schwartz (2009) also found that the benchmarking scheme has generated good results, although they argue that some of the benefits are subject to “erosion” over time, and recommend some methodological innovations to give a new boost to the effectiveness of the scheme. In a comparative study of incentive schemes used in the water sector, De Witt and Marques (2007) found that the Dutch water sector performs better in terms of efficiency and effectiveness than the water sectors in Australia, Belgium, Portugal, and England and Wales.

F10.11

The industry-led approach to benchmarking the performance of water providers in the Netherlands is a leading practice.

Benchmarking in New Zealand

There is already some benchmarking undertaken in New Zealand. For example, Watercare has been undertaking its own benchmarking, including comparisons with Australian water providers and with other New Zealand utilities (PwC, 2012). In addition, the 2010 amendments to the Local Government Act 2002, require the Secretary for Local Government to make rules specifying performance measures in relation to water supply, sewerage, stormwater, flood protection, and the provision of roads and footpaths:

The purpose of rules made under section 261B is to provide standard performance measures that are applicable to local authorities so that the public may compare the level of service provided in relation to a group of activities by different local authorities. (LGA, 2002, s 261a)

Local authorities are required to incorporate performance measures outlined in these rules in the development of their 2015–2025 Long-Term Plans. Performance measures will be reported for the first time in the 2015/2016 annual reports.

The most substantive benchmarking initiative is the *National Performance Review* (NPR), which has been conducted by Water New Zealand since 2008 (Water New Zealand is the principal industry organisation for water services in New Zealand). The NPR is a voluntary benchmarking exercise that collates performance metrics on assets, financial management, customer service levels and a range of social and environmental criteria (Water New Zealand 2015). Positive features of the NPR benchmarking exercise include:

- International comparisons – the most recent edition of the NPR includes benchmarks drawn from five international studies. International benchmarks are particularly relevant for New Zealand’s largest water provider (Watercare) for whom there are no providers of similar scale in New Zealand.
- Alignment with other performance reporting initiatives – the NPR draws together performance data from other sources including performance reporting requirements under the LGA 2002 (discussed above).
- Verification – auditors have been employed to review data quality and to identify inconsistencies in reporting. For the most recent edition of the NPR, auditors conducted a desk top review of all data supplied to check issues such as interpretation and compliance with indicator definitions, and also conducted more detailed site audits with 20% of participants.

While the NPR is a welcome addition to the institutional framework for water services, it does not yet appear to have the effectiveness of more established benchmarking systems like that of the Netherlands. The NPR initiative could be strengthened by addressing the following issues:

- Patchy participation rates – 31 of New Zealand’s 66 three waters service providers participated in the most recent NPR. However those providers that did participate provide services to over 70% of the population, and participation rates have been increasing steadily since the initiative’s inception.
- Incomplete or poor quality data – the NPR notes that “accuracy is limited by a participant’s data availability and their ability to consistently interpret indicators” (Water New Zealand, 2015, p. 16). The NPR includes a confidence rating for the benchmarking indicators, and for some indicators this rating suggests a need for more robust data. For example, the confidence rating for water loss indicators shows that fewer than half of participants rated their data as “reliable” or “highly reliable”.
- Little time series information – greater use of time series data for key performance indicators would help to identify trends in performance over time.
- Additional performance indicators relating to new connections – the current indicators in the NPR focus on management and performance of existing water assets. The development of new indicators that measure the efficiency of new connections to the network would be a useful addition, given its importance for the supply of land for housing.

In the absence of explicit economic regulation of water provision, New Zealand needs to ensure that self-regulatory approaches such as benchmarking are robust. Water New Zealand’s NPR is good practice, however with greater industry buy-in and further development of some indicators its effectiveness could be strengthened. LGNZ, as the advocacy body for local government in New Zealand, is well-positioned to work with councils to encourage more substantive participation in the NPR.

F10.12

Water New Zealand’s *National Performance Review* is a good practice. However its effectiveness could be strengthened with greater industry buy-in and further development of some indicators.

R10.8

LGNZ should support Water New Zealand’s benchmarking initiative by encouraging all councils to participate and by working with councils to assist them in improving their data quality.

10.9 Conclusion

The supply of both transport and water infrastructure are critical components in an effective supply of land for housing. The governance arrangements for these assets are quite different – for transport infrastructure, central government plays a central role both in a planning and funding capacity, while the arrangements for water infrastructure are much more devolved.

The main concern relating to governance of transport infrastructure stems from the incentives facing the NZTA and local councils. The NZTA responds to the objectives set for them by central government. Because these objectives do not include specific reference to land supply for housing, tensions can emerge between the NZTA and council priorities. Directing the NZTA to include in its objectives consideration of how transport infrastructure can support the growth of cities is one option available that would help high-growth areas increase the supply of land for housing.

Water infrastructure in New Zealand, as in many other countries, is provided by local public monopolies. As such, they are subject to a number of issues and incentives that can hinder their ability to respond to demands for water services to support urban growth. Reform of water services in other countries has centred on exploiting economies of scale and introducing commercial disciplines. This is often done in combination