Gas distribution networks' dividends in RIIO-GD3

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Prepared for GB gas distribution networks

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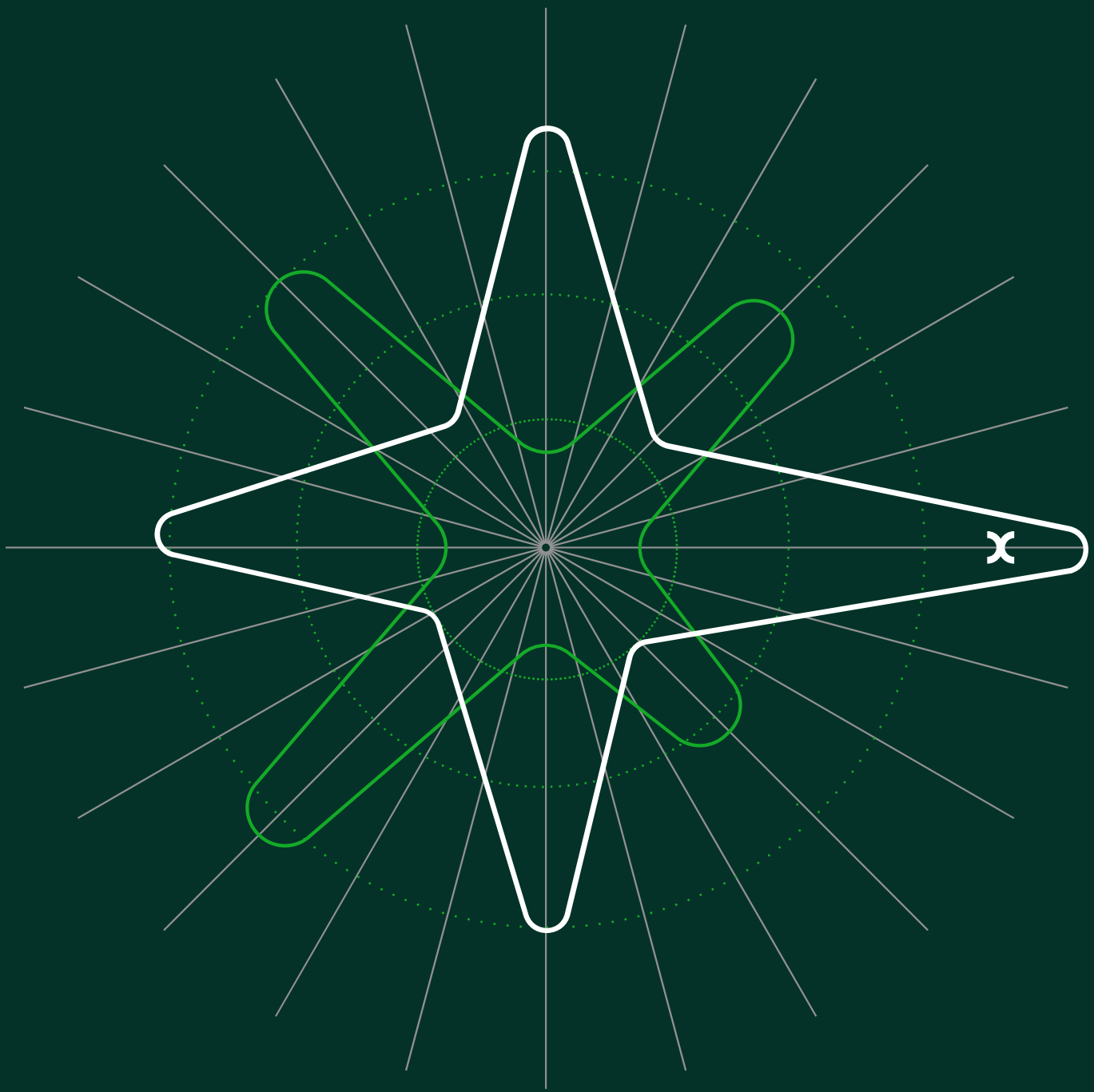

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Executive summary

In this report, we assess, on behalf of the GB gas distribution networks (GDNs)—i.e. Cadent, Northern Gas Networks (NGN), Scotia Gas Networks (SGN) and Wales & West Utilities (WWU)—the role of dividends in the RIIO-3 price control and the evolving context around it.

Dividends are a way to remunerate shareholders (the other being share price appreciation). As a result, dividend expectations are a crucial component of a shareholder's assessment of the value of the company. Based on this premise, dividend yields, i.e. the ratio between the dividends paid by the company and the (market) value of its equity, can be linked to the expected growth rate of the dividends paid by the company and to its cost of equity.[1]

Also, dividend expectations depend on the ability of the business to reinvest the cash it generates into profitable investment opportunities: a business that is mature and less likely to expand will likely pay more dividends than a business that is growing its asset base.

This has implications for a regulator carrying out an investability assessment that aims to ensure that the sectors it regulates can attract and retain equity capital: from the perspective of the investors investing into assets that are currently early in their lifecycle, the future treatment of their assets may be informed by the regulatory treatment of mature assets in other sectors. In that regard, the investability assessment should assess the ability of the regulatory framework to not only attract and retain capital, but also to return it to shareholders.

When considering the economic context of the gas sector over RIIO-3 and subsequent price controls, the application of these principles should lead Ofgem to account for an increase in the dividend yield of gas networks in its financial modelling. This would be reflective of the fact that the expected regulatory asset value (RAV) growth of gas networks from RIIO-3 may be lower than before—or even negative at some point in RIIO-3 or subsequent price controls. This will mechanically put the dividend yield of gas networks under upward pressure, to the

[1] It is implicit within the formulation of the dividend growth model—which links the cost of equity, dividend yield and dividend growth—that when the dividends paid out by a company are no longer expected to grow (or to decrease), the dividend yield would tend to, at least, equate to the company's cost of equity.

point that it may be higher than the cost of equity allowance itself (when capital needs to be returned to investors).

Specifically, the introduction of accelerated depreciation, which precisely aims to return the RAV (i.e. return *of* capital, rather than return *on* capital) to investors faster than under the status quo, will put further upward pressure on the GDNs' dividend yields by increasing the cash available for distribution in the short to medium term. As ongoing investment requirements reduce relative to depreciation allowances, it would be appropriate for the additional cash generated by accelerated depreciation to be redistributed by GDNs to their shareholders—otherwise, capital that could be used to fund investment growth in other regulated sectors could be trapped, undermining Ofgem's aims for investability.

For the purpose of the regulator's financeability assessment (i.e. the ability of the regulated companies to service their debt obligations), assumptions need to be consistent between RAV growth, gearing, cost of capital and dividend yield. In light of the dynamics discussed above, it would be appropriate for Ofgem to adopt a higher dividend yield assumption in its financial modelling than the 3% assumption currently being considered (the same as in RIIO-GD2). Otherwise, the regulator's financeability assessment may reach inaccurate conclusions on the financeability of the regulatory package and force networks to limit dividend distributions.

In particular, a higher dividend yield is necessary to maintain the gearing at or around the notional assumption, as higher distributions to shareholders would counterbalance the downward pressure that the introduction of accelerated depreciation (and lower RAV growth more generally) would put on the GDNs' gearing. We note that Ofgem seems to acknowledge this necessity, as its latest Business Plan Guidance to gas networks for RIIO-3 includes an assumption of dividend distribution explicitly aimed at maintaining notional gearing.

It would be inconsistent, however, to address financeability concerns by adjusting the dividend yield downwards; in particular, it would be inconsistent to introduce accelerated depreciation to return invested capital to investors faster and, at the same time, to restrict dividend payments for financeability purposes. This signals to investors that sufficiency of cash flows to service debt will be achieved at the expense of maintaining adequate incentives for equity investment. In particular, it sends a negative signal to investors that dividend payments might be reduced even when investors expect to realise their returns and recoup their investment through higher dividend payments.

While it is understandable for the regulator to look to ensure that dividend increases are not carried out at the expense of financial resilience, we consider that as long as financial resilience requirements are met by network companies, their dividend policies should not be constrained in a way that would make them fail to meet investors' expectations.

These conceptual remarks are reinforced by the evidence that suggests that, recently, the trends in dividend payments between European gas and electricity networks have started to diverge. Indeed, the average dividend yield of European gas networks has increased from 5.4% in 2018 to 7.4% in 2023, which exceeds the average dividend yield of European electricity networks, the latter remaining relatively constant over the same period (between 4.1–4.8%). Importantly, empirical evidence also confirms that a 3% dividend yield assumption for gas networks is insufficient—even without upward pressure on the (future) dividend yield from the return of capital, in the context of accelerated depreciation.

This observation is consistent with the fact that the growth rates in fixed assets on these networks' balance sheets have also been different, with average asset growth of gas networks being lower than that of electricity networks. This further supports the recommendation that Ofgem appropriately differentiates the dividend policies of gas and electricity networks in its financeability and investability assessments, in particular, allowing for a higher dividend yield for gas networks.

1 Introduction

1.1 The GB gas distribution networks (GDNs)—i.e. Cadent, Northern Gas Networks (NGN), Scotia Gas Networks (SGN) and Wales & West Utilities (WWU)—have asked Oxera to assess the role of dividends in the RIIO-3 price control and the evolving context around it.

1.2 In RIIO-3 and beyond, gas and electricity networks expect to face differentiated challenges: mainly, a required rapid growth in electricity network assets, and a reduction in the long-term demand projections in gas. In this context, in its Sector Specific Methodology Consultation (SSMC) and Sector Specific Methodology Decision (SSMD), Ofgem has placed an emphasis on the following aspects of its regulatory framework.

- It introduced the concept of investability in the SSMC, explaining that the objective of the investability assessment is to 'better understand whether the allowed return on equity is sufficient to retain and attract the equity capital that the sector requires'.[2] In the SSMD, Ofgem did not fully develop a framework for assessing investability, but indicated that it intends to ensure investability by primarily focusing on the accuracy of its cost of equity estimate. To achieve this, Ofgem will concentrate on picking appropriate values for each parameter, cross-checking this estimate using several methods, and accounting for any new risks compared to RIIO-2.[3] It will also aim to adequately compensate equity financing costs (for example, equity issuance costs).[4] Finally, Ofgem is considering improvements to the financeability[5] assessment it adopted in RIIO-2 by examining a broader range of credit metrics over an extended period of time.[6]

[2] Ofgem (2023), 'Consultation – RIIO-3 Sector Specific Methodology Consultation – Finance Annex', 13 December, para. 1.6.
[3] Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, paras 1.16 and 3.245.
[4] Ibid.
[5] Financeability analysis as conventionally performed is arguably a subset of an investability assessment, because financeability primarily focuses on debt investors, rather than on all investors, including equity. Ensuring investability therefore goes beyond financeability—for a price control to be investable, it must be highly likely that the company can attract and retain the equity capital needed to deliver desired investment.
[6] Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, paras 1.16, 5.10, 5.29 and 5.34.

- It developed the existing financial resilience framework,[7] which may be particularly relevant for the uncertain growth path in the regulatory asset value (RAV) for gas networks, as changing RAV profiles, and their associated cash flows, may materially impact gearing.[8]
- It acknowledged some of the differences between sectors. For example, it confirmed that different potential RAV evolution profiles require different regulatory depreciation profiles between gas and electricity.[9]

1.3 In its SSMD, Ofgem has indicated that its dividend yield working assumption currently stands at 3% (unchanged from RIIO-2).[10] We understand that this assumption is applicable to both the electricity and gas sectors, although Ofgem has indicated that it intends to continue working with stakeholders on forming an appropriate assumption.[11]

1.4 Furthermore, Ofgem indicates in its business plan scenarios that a dividend distribution reduction scenario is only to be applied by the electricity networks, where assumed dividends as a percentage of equity are modelled at 1.5%.[12] Crucially, Ofgem did not consider a reciprocal assumption of a higher dividend yield for networks with low expected RAV growth, such as GDNs.

1.5 In this report, we examine various aspects of dividend policy in the context of RIIO-3, taking into account the factors below.

- Dividends are important for investor confidence and therefore investability.
- Network companies will be constrained in their dividend policies by financial resilience requirements.
- Regulatory approaches to dividends may need to be different for electricity and gas, given the significant differences in the circumstances that these sectors face.

[7] Ibid., section 6.
[8] In particular, Ofgem amended the dividend lock-up mechanism that would trigger at the earlier of a network reaching the BBB- credit rating with a negative watch or outlook or a 75% net debt to RAV. Other financial resilience measures include amendments to the licence conditions with regards to requirements to maintain more than one investment grade credit rating, and to the availability of resources requirement. See Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, paras 6.40, 6.61 and 6.76.
[9] Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, section 8.
[10] Ibid., para. 3.282.
[11] Ibid.
[12] Ibid., Table 15.

1.6 As a result, we discuss how the dividend yield of gas networks may be subject to upward pressure and require a more flexible approach going forward, to accommodate investor expectations in light of changing and uncertain circumstances.

1.7 Finally, we observe the recent dividend payment trends of European gas and electricity networks, and check these for consistency with the theoretical concepts discussed in other sections of the report.

1.8 The remainder of the report is structured as follows.

- Section 2.35—we discuss, conceptually, why we observe a need for flexibility in gas network dividend payment policies and, therefore, expect potential upward pressure on their dividend yield in RIIO-3.
- Section 3—we discuss how this could be accounted for in Ofgem's regulatory framework.
- Section 4—we provide an empirical analysis of the evolution of dividend yields and payout ratios of publicly listed European gas and electricity networks over the past few years, to assess whether a diverging trend exists between the sectors. We place this into context in relation to the changes in their fixed assets growth in recent years, to assess the existence of a relationship between dividend yields and payout ratios on the one hand, and fixed assets growth on the other.
- Section 5—we present our conclusions.

2 Principles for adopting an appropriate dividend policy assumption in a regulatory context

2.1 In this section, we discuss the principles that should guide a regulator in adopting an appropriate dividend policy assumption in a regulatory context.

2.2 We start by discussing how dividends are key elements of a company's financial policy and of shareholders' expectations. Then, we discuss the link between dividends and growth, and draw implications, from a regulator's perspective, for sectoral differentiation and in ensuring investability.

2.1 Dividends as a key element of a company's financial policy and of shareholders' expectations

2.3 In exchange for their investment into the business, shareholders may be paid dividends, which are one of two ways whereby equity holders may realise their return on investment, the other being share price appreciation.

2.4 Financial economic theory states that the value of an asset today corresponds to the sum of the cash flows it will generate in the future, discounted to their value today. In the case of a firm that pays dividends (which is usually the case for infrastructure businesses, including gas networks), these dividends are typically the cash flows paid to the shareholders.

2.5 As a result, shareholders form a view on the value of their participation based (in part) on the dividends they receive from the business. Dividends are, therefore, a fundamental building block of the value of a company's equity and play an important role in strengthening investors' confidence.

2.6 Dividends and share price appreciation differ in that dividends are a way to return cash to shareholders over time, whereas share price appreciation is achieved by reinvesting this cash into the business (causing an increase in the value of the business), instead of distributing it to shareholders.

2.7 Dividend policy therefore depends on whether it is more economically efficient for the business to distribute the cash it

generates from its activities to shareholders or to invest this cash into profitable projects.

2.8 Crucially, dividend policy should focus on ensuring that cash is not idly trapped in the business, i.e. not being reinvested into profitable opportunities within the business, or not being distributed to shareholders who might make a better use of it.

2.9 The only constraint, in that regard, should be to ensure that enough cash is retained in the business to ensure its financial resilience: holding all else constant, the payment of dividends has an upward impact on gearing, as this will reduce the equity value of the business relative to net debt. Also, the payment of dividends should not preclude the business from being able to meet its financial obligations, in particular debt principal and interest payments, while maintaining a satisfactory credit rating.

2.10 Concerns around the financial sustainability of the business—in particular around its ability to sustain its debt—may therefore legitimately constrain the dividend policy of the business, which is addressed by Ofgem through its financial resilience requirements.

2.11 Combining these two requirements—i.e. efficient distribution of cash between internal projects and shareholders, and financial resilience—implies that dividend policy should be flexible to: the level of cash that is being generated by the business, the potential for growth, and the business' financial resilience.

2.12 Furthermore, dividend policy might be responsive to 'clientele effects', i.e. the tendency of different groups of investors to prefer different dividend policies based on their tax situations or income preferences.

2.13 In particular, dividend stickiness in the utilities and infrastructure sector results from a well-documented clientele effect whereby investors in this sector favour the regular and predictable income provided by dividend payments.[13]

[13] In our report discussing the investability of the water sector in the context of PR24, we have examined the clientele effect in the utilities and infrastructure sector, reviewing the academic

2.14 This seems to be acknowledged by Ofgem in its SSMD when it states:

we are open-minded to the requirements of investors, and we do see the potential benefit in considering issues such as the dividend preferences of investors in the utilities sectors (who often have underlying income requirements).[14]

2.15 From a regulator's perspective, taking into account this income expectation is important to ensure that investors are willing to commit equity to the regulated companies—making the regulatory settlement investable.

2.16 Ultimately, this means that the dividend policy must be flexible to the various parameters mentioned above in paragraph 2.11, subject to the constraint of shareholders' expectations. For utilities in particular, the expectation is that companies are able to generate steady dividend payments.

2.17 Assessing what is an efficient distribution of cash between internal projects and shareholders depends on whether the business has significant potential for investment or disinvestment. From a regulator's perspective, and for the purpose of assessing and ensuring investability, this has implications depending on the sector that is regulated.

2.2 The relationship between dividends and growth: impact on investability

2.18 Based on the premise that dividends are a key determinant of a business' valuation, Dividend Discount Models (DDM) establish a relationship between the dividend yield, the cost of equity and the dividend growth rate. In the simple Gordon growth model, the relationship stems from the formula that equates a stock's price with the dividend, cost of equity and an assumed constant dividend growth rate, as follows:

$$P_0 = \frac{D_1}{k - g} \quad (1)$$

literature as well as expectations of major infrastructure funds. We also showed that the dividend yields of regulated utilities are stable even when they issue new equity. See Oxera (2024), 'Investability at PR24', 27 August, section 4.2 to 4.4.

[14] Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, para. 3.282.

Where:

- P_0 is the share price in period 0;
- D_1 is the expected dividend per share in period 1;
- k is the cost of equity; and
- g is the constant dividend per share growth rate.

2.19 This formula can be rewritten as:

$$\frac{D_1}{P_0} + g = k \ (2)$$

where $\frac{D_1}{P_0}$ is the expected dividend yield of the company.

2.20 Although the Gordon growth model is based on a number of assumptions that may not be held in practice (such as constant dividend growth rate and gearing), it allows an understanding of how the three parameters that underpin it interact with each other.

2.21 Specifically, it explains how the expected dividend yield of a company should evolve depending on the expected dividend per share growth rate and cost of equity.

2.22 In particular, formula (2) suggests that, all other things equal, the dividend yield should increase as the expected dividend growth rate decreases, and should also increase as the cost of equity increases.

2.23 In practice, this means that the dividend policy of a business will typically depend, in part, on where it stands in the lifecycle of the products or services it provides.

2.24 In particular, if there are limited investment opportunities with the potential to generate future growth in the expected dividend per share (as may be the case in a mature or declining sector), companies will favour distributing dividends over reinvesting into the business. Shareholders can then reinvest these dividends into other investment opportunities.

2.25 We note that the relationship between the dividend yield and the expected dividend per share growth rate is not necessarily linear or symmetrical (as suggested by the empirical evidence examined in section 4.2). This is because, due to the clientele effects discussed in section 2.1, dividends in the utilities sector

are likely to be affected by the income requirements of shareholders as an additional constraint on their financial policy. Specifically, dividends in the utilities sector are sticky downwards (i.e. there is a resistance to downward revision in the level of dividend distributions) since utility investors favour the regular and predictable income provided by dividend payments.

2.26 In a regulated environment, investors will expect regulators to consistently apply this approach to the businesses they regulate.

2.27 Indeed, investors that are investing today in regulated assets that are currently in the 'growth' phase of their lifecycle (for example, nuclear) will expect regulators to issue regulatory determinations that treat all assets appropriately depending on the stage they are at in their lifecycle.

2.28 In other words, Ofgem's treatment of sectors that may be in the 'no-growth' or even 'decline' stage of their lifecycle will tend to inform investors' expectations, and investment decisions that are made today, with regards to sectors that are in the 'growth' phase of their lifecycle.[15]

2.29 This means that in order to appropriately assess and seek to ensure the investability of the various assets it regulates, Ofgem should appropriately account for how investors expect equity to be remunerated and returned, over time and across sectors.

2.30 This would be consistent with the fact that Ofgem is minded to treat the gas and electricity sectors differently with regards to the depreciation profiles being applied to the RAV.[16]

2.31 In that regard, Ofgem has retained a cross-sectoral 3% dividend yield assumption in its SSMD.[17] It also asked that electricity transmission operators model, in their business plan scenarios, a reduction in the dividend yield assumption of 1.5% (i.e. bringing the assumed dividend yield to 1.5%).[18]

[15] See Oxera (2024), 'Risks and investability of the GB gas distribution sector', 1 March, section 5.
[16] Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, paras 8.19 and 8.40.
[17] Ibid., para. 3.282.
[18] Ibid., Table 15.

2.32 It also means that it would be unreasonable to impose restrictions on cash flow not needed to support investment from being distributed in the form of dividends. Given that the gas sector may face uncertain and potentially changing investment requirements in RIIO-3 and over time, it is important that companies are not artificially constrained by a rigid ex ante dividend yield assumption.

2.33 Any potential concerns around companies' financial resilience in light of their dividend policy should be addressed through financial resilience requirements rather than a potentially over-rigid dividend yield assumption.

2.34 To summarise, assessing the investability of a sector involves different expectations over the lifecycle of an asset. In that regard, in order to appropriately assess the ability of a business to attract and retain capital, the regulator also needs to signal how it intends for that business to return capital to its shareholders over the lifecycle of the asset, and to take appropriate action in order to reflect this in regulatory decisions.

2.35 We therefore welcome Ofgem's inclusion of a new dividend assumption in the business plans, explicitly aimed at returning capital to the GDNs' shareholders through dividend payments.[19] This is potentially relevant to a wider base of investors than in the gas sector. Specifically, including such assumptions in regulatory guidance works towards signalling to investors in sectors currently at the growth phase of their lifecycle how the regulator intends to set the regulatory package when these assets are mature.

[19] Ofgem (2024), 'RIIO-GD/T3 BPFM Guidance v7', 30 September, para. 1.14. The assumption is designed such that notional gearing is kept constant over time.

3 Implications for dividends over RIIO-3 and subsequent price controls

3.1 The principles outlined in section 2 have several implications for the dividend yield of GDNs over RIIO-3 and subsequent price controls. Ofgem needs to consider these in its financial assessment.

3.2 The purpose of this section is to outline these implications. First, we discuss how the RAV growth profile can impact the dividend yield of gas networks over RIIO-3. Second, we consider how Ofgem should avoid effectively trapping the additional cash proceeds resulting from the potential introduction of accelerated depreciation in RIIO-3 in gas networks' balance sheets. Finally, we discuss the interactions between dividend yields and financial resilience.

3.1 Implications of the GDNs' expected RAV growth for dividend payments

3.3 In section 2.2, we outlined how companies that have limited prospects to grow their expected dividends per share in the long run are more likely to distribute excess cash to their shareholders.

3.4 As the implementation of net zero policies creates significant uncertainty over gas usage in the long term, GDNs may well reduce or cease investment in RAV-expanding work programmes. Consequently, their RAV could start declining at some point.

3.5 The introduction of accelerated depreciation would exacerbate this trend, as it would lead the RAV to depreciate faster compared to the status quo.

3.6 This dynamic will inhibit the possibility for GDNs to sustain high dividend per share growth rates in the future: in that regard, the DDM can provide a useful cross-check of the internal consistency of the GDNs' regulatory package, including the choice of dividend yield assumption.

3.7 In particular, any dividend yield set below the cost of equity implies the ability for the company to grow its per-share

dividend payments into perpetuity, which is an unrealistic assumption for the gas sector in the long term.

3.8 This cross-check can also be used to assess the consistency of the regulatory package with respect to cost of equity and dividend assumptions compared to RIIO-2, taking into account the evolution of the cost of equity and RAV growth expectations between RIIO-2 and RIIO-3. In that regard, the SSMD suggests that the cost of equity is set to increase compared to RIIO-2.[20] Combined with assumptions regarding future dividend per share growth in the gas sector, the cross-check should provide Ofgem with directional evidence as to how the appropriate dividend yield should evolve compared to RIIO-2. Specifically, this directional evidence suggests that the dividend yield of GDNs should be higher than during RIIO-2.

3.9 More generally, Ofgem should contemplate moving away from its 'one-size-fits-all' approach in RIIO-2 to setting the dividend yield in its regulatory modelling, where the yield is identical across sectors (and, in particular, between electricity and gas) and adopting an approach that is robust to investors' expectations, including with regards to the growth prospects of the sector, noting the importance of maintaining adequate dividend per share levels to attract and retain equity into the utilities and infrastructure sector (as discussed in section 2.1, and in other work done by Oxera[21]).

3.10 Specifically, if RAV growth is expected to flatten over multiple price controls, then the dividend policy needs to be sufficiently flexible to adjust accordingly, as would be expected from shareholders. As per the dividend growth model, the dividend yield will tend towards the cost of equity as the (expected) growth rate in dividends tends to zero.

3.11 For this reason, it would be appropriate for Ofgem to have its dividend yield assumption and cost of equity allowance converge over the next price controls, starting with RIIO-3, and therefore to increase its dividend yield assumption compared to RIIO-2. This would reflect expectations of a slower RAV growth in RIIO-3 and subsequent price controls. In other words, as the RAV

[20] The 4.57–6.35% is higher than the 4.55% CAPM-implied cost of equity calculated in the RIIO-2 final determinations (Ofgem (2021), 'RIIO-2 Final Determinations – Finance Annex (REVISED)', 3 February, p. 24).
[21] See Oxera (2024), 'Investability at PR24', 27 August, section 4.

ceases to grow, the GDNs' remuneration on capital would be paid out to shareholders in dividends (instead of being reinvested into the networks).

3.12 Furthermore, if the RAV is expected to decline in the long term, GDNs will be unable to sustain growing dividend payments given the functioning of the regulatory building blocks model. Instead, a sustained decline in the RAV suggests that invested capital needs to be returned to investors.

3.13 In order for capital to be returned to investors, total dividend distributions by network companies would need to cover the remuneration on capital, but also the return of capital to shareholders. This will put an upward pressure on the dividend yield of GDNs, to the point that it will exceed the cost of equity allowance—as long as financial resilience is not compromised, it would be adequate for Ofgem to reflect this in the regulatory settlement.

3.14 We note that, in the RIIO-3 Business Plan Guidance, Ofgem created a new dividend assumption in the business plans, called 'Assumed return of capital as % of equity', which Ofgem has indicated should be used in order to 'maintain a notional capital structure'[22] (we discuss further the interaction between dividend distributions and gearing in section 3.3.2). The distinction between this assumption and the dividend yield assumption suggests that Ofgem would accept an overall dividend yield in excess of the cost of equity allowance.

3.15 Overall, we conclude that allowing a higher dividend yield for gas networks compared to RIIO-2 would constitute appropriate regulatory action, given the potential pathways for RAV growth of the gas sector over RIIO-3 and subsequent price controls.

3.2 Implications of the introduction of accelerated depreciation for dividend payments

3.16 Another implication comes from the fact that accelerated depreciation will lead to higher cash flows available for distribution in the short term. As outlined in section 2.1, this

[22] Ofgem (2024), 'RIIO-GD/T3 BPFM Guidance v7', 30 September, para. 1.14.

additional cash can either be reinvested into the business or distributed to shareholders.

3.17 Ultimately, expectations that RAV growth will be lower in the future, or even negative,[23] mean that significant reinvestments into the business in the long term are less likely (although Ofgem aims to ensure that investments remain sufficient for network reliability[24]). Accordingly, a more efficient use of the cash generated by networks' earnings would be to distribute it to shareholders as dividends and avoid it being trapped into the business.

3.18 As discussed in section 2.2, it is important for investability that the regulator's decision on the dividend policy of gas networks for RIIO-3 reflects shareholders' expectations of the appropriate dividend policy given the different potential lifecycle stage that gas networks may experience. In particular, the perspective of the gas sector, and of gas networks for the coming decades, calls for any excess capital—especially when stemming from negative RAV growth—to be returned to shareholders in order to be invested into other sectors.

3.19 This would be consistent with the rationale that leads Ofgem to contemplate the introduction of accelerated depreciation: the purpose of this change is precisely to allow investors to recoup their investments faster in order to limit their exposure to asset stranding risk.

3.20 Separately, from a balance sheet perspective, cash remaining trapped in the business would put a downward pressure on networks' gearing over RIIO-3 and subsequent price controls, as additional cash reduces (all other things equal) the net debt as a proportion of the RAV.[25]

3.21 In order to maintain a constant gearing ratio, the notional company would need to increase its dividend distributions (or perform share buybacks) in the short term in order to counterbalance the downward pressure exerted by higher

[23] Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, para. 1.10.
[24] Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – GD Annex', 18 July, para. 1.21. In that regard, we note that GDNs have to justify their investments (for example, under the NARM framework). See Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – GD Annex', 18 July, para. 3.7.
[25] Mathematically, this is true, as long as the net debt is inferior to the RAV.

depreciation allowances on gearing (as discussed in paragraph 2.9).

3.22 In other words, introducing regulatory changes that put a downward pressure on gearing through higher depreciation allowances (i.e. higher cash generation) without changing the dividend distribution assumption would be inconsistent with the assumption of a constant gearing ratio at the level of the notional company.

3.23 Overall, this suggests that Ofgem should acknowledge that gas networks may have to increase their dividend payments over RIIO-3 and subsequent price controls. Additionally, they should have the flexibility to do this as required, including by having dividend yields in excess of the allowed cost of equity to allow for the return of capital to shareholders. Subject to the networks being able to remain financially resilient, including the maintenance of an appropriate gearing constraint given this objective, the dividend policy of networks should be unconstrained by Ofgem's regulatory decisions.

3.3 Dividends and financial resilience

3.24 In this section, we discuss the consistency between higher dividend payments (in line with higher cashflows due to sector specific investment and depreciation profiles) and other elements of the regulatory package in the context of the networks' financial resilience. As discussed in sections 3.1 and 3.2, ensuring this consistency requires increasing the dividend yield assumption compared to RIIO-2.

3.25 Specifically, we discuss how suggested regulatory changes are likely to impact gearing and establish why a fit-for-purpose financeability assessment (i.e. an assessment of the regulated companies' ability to service their debt obligations) should account for higher dividend payments.

3.3.2 The impact on gearing of suggested regulatory changes

3.26 As discussed previously, if cash remains trapped on the networks' balance sheets, their gearing will tend to decrease significantly over time. In this context, Ofgem might have to approve a regulatory package where dividend yields would significantly increase under the upward pressure of lower—or even negative—RAV growth, compounded by the introduction of accelerated depreciation.

3.27 With regards to the introduction of accelerated depreciation, Ofgem has already acknowledged in the SSMC that 'for gas, if RAV is returned more quickly this could create implications for financial resilience if licensees do not reduce indebtedness in broadly the same proportion to RAV returned as existing gearing levels'.[26] However, Ofgem does not develop the narrative on this in its SSMD.

3.28 The implication is that if networks were to follow this guidance, their dividends would also need to increase in the same proportion so as to maintain a stable gearing ratio. All other things equal, in an accelerated depreciation scenario, this would cause an increase in dividend yields. We note that this reasoning is true at the notional company level.

3.29 Constraining the dividend policies of GDNs would, in that regard, compel the networks to reduce their actual gearing levels, as in a context of decreasing investment needs for the gas sector, there would be few alternative uses for the additional cash derived from the introduction of accelerated depreciation.

3.30 This contradicts Ofgem's statement in the SSMD that 'actual capital structures are a choice for company management and owners'.[27] Indeed, while networks can choose to reduce gearing faster by using additional cash proceeds resulting from the introduction of accelerated depreciation, they should also have the possibility to maintain a stable gearing ratio by having the choice of increasing dividend yields for this purpose.

3.31 Ofgem's inclusion of a new gas-specific 'Assumed return of capital as % of equity' assumption in its Business Plan Guidance aims to take this dynamic into account. Indeed, the regulator explicitly indicated that it 'expect[s] Licensees to use this input to maintain a notional capital structure'.[28] This suggests that Ofgem is conscious that dividends would need to increase in the medium to long term (to the point of exceeding the cost of equity allowance) in order to maintain the notional gearing assumption.

[26] Ofgem (2023), 'Consultation – RIIO-3 Sector Specific Methodology Consultation – Finance Annex', 13 December, para. 1.12.
[27] Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, para. 4.5.
[28] Ofgem (2024), 'RIIO-GD/T3 BPFM Guidance v7', 30 September, para. 1.14.

3.32 Ultimately, if Ofgem fails to adjust the dividend yield assumption to counterbalance the downward pressure that lower (or negative) RAV growth and accelerated depreciation would put on the GDNs' gearing, it would put the use of a notional gearing assumption under some tension. In practice, not adjusting the dividend yield assumption would tend to cause a divergence between the networks' actual capital structures and the notional gearing assumption, rendering the notional gearing assumption unrealistic.[29]

3.3.3 Implications for the financeability assessment

3.33 If Ofgem fails to account for investors' expectations in terms of dividend payments, the regulator's financeability assessment might reach inaccurate conclusions. For example, Ofgem might conclude that networks are financeable on the basis of a dividend yield assumption that does not appropriately reflect shareholders' expectations.

3.34 In that regard, a 3% dividend yield assumption might overestimate some of the GDNs' financeability metrics over RIIO-3, which could in turn lead the regulator to fail to accurately identify financeability constraints and remedy them by adjusting the regulatory package accordingly.

3.35 Furthermore, it is important to note that if financeability concerns are indeed identified, Ofgem has signalled that one of the levers under consideration to address them could be a reduction in dividend payments.[30]

3.36 However, it would be inconsistent for Ofgem to, on the one hand, introduce accelerated depreciation (which precisely aims to return the RAV to investors faster than under the status quo), thereby putting upward pressure on the GDNs' dividend yields, while, on the other hand, using (restriction of) dividends as a financeability lever.

3.37 The suggestion that financeability concerns can be addressed at the expense of dividend payments creates a tension between financeability and investability. This is because financeability analysis in regulated settings has tended to be relatively

[29] In that regard, we note that the actual gearing of the GDNs is currently close to the notional gearing assumption, even if it has decreased between 2022 and 2023. See Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, para. 6.69.
[30] Ibid., para. 5.11.

narrow—i.e. with a focus on achieving sufficient cash flows to service debt, while ensuring investability necessitates looking beyond debt financing to also ensuring that equity capital can be attracted and retained in the sector. If reducing dividend payments is a remedy for financeability concerns, then this suggests that sufficiency of cash flows to service debt will be achieved at the expense of maintaining adequate incentives for equity investment.

3.38 Overall, indicating that financeability concerns might be addressed by a reduction in dividends sends a negative signal to investors in the gas networks, who now expect to realise their returns through dividend payments given limited future growth opportunities, as well as to investors in other sectors (who, as discussed in section 2.2, may look at how sectors that are currently in the 'no-growth' or 'decline' stage of their lifecycle are treated by the regulator, to inform their investment decisions today). This is especially true if the regulator is considering a reduction in dividends to a level of yield that is inconsistent with the expectations of shareholders (as discussed in section 2.1).

3.39 Therefore, other avenues should be favoured to address any residual financeability concerns that might exist regarding the GDNs' business plans for RIIO-3.

3.40 First, we note that the regulatory framework already includes mechanisms that disincentivise excessive gearing. For example, the tax clawback mechanism negates the incentive that networks might have to gear up in order to generate additional tax savings compared to the notional company, as these tax savings would be passed on to consumers. Ofgem has acknowledged that this mechanism indeed works as a disincentive to gear up.[31]

3.41 Then we consider that financial resilience requirements also constitute a safeguard against unreasonable distributions of cash by networks. Ofgem is proposing to strengthen these requirements as part of RIIO-3. In particular, Ofgem is minded to the following amendments.

[31] Ofgem (2023), 'Consultation – RIIO-3 Sector Specific Methodology Consultation – Finance Annex', para. 6.10.

- Amend the licence condition such that licensees would be 'required' to maintain 'more than one' investment grade rating. This would strengthen the wording compared to the current condition, which instructs licensees to 'use reasonable endeavours' to maintain just one investment grade rating.[32]
- Amend the dividend lock-up trigger to be the earlier of reaching BBB- with a negative watch or outlook, or 75% regulatory gearing.[33]
- Amend the board certification requirement to require that licensees state that they have sufficient financial resources to cover the entirety of the price control or a minimum of three years ahead.[34]

3.42 Additionally, Ofgem has increased networks' reporting requirements of MidCo- and HoldCo-level financing structures in the context of recent changes to the Regulatory Financial Performance Reporting guidance. As a result, no further action is proposed by Ofgem as part of the RIIO-3 process.[35]

3.43 To conclude, consistency between the different elements of the regulatory framework, the overall economic context of the gas sector, and with investors' expectations are essential to properly maintain the financial resilience of the sector. It is also important to signal to investors that the regulatory package is appropriately calibrated, and investable at all stages of an asset's lifecycle.

3.4 Conclusion

3.44 In this section, we described the implications of the principles outlined in section 2 when applied to the potential circumstances of the gas sector over RIIO-3 and subsequent price controls.

3.45 In particular, we explained how dividends will be subject to upward pressure in the future, due to lower—or even negative—RAV growth as a result of limited growth opportunities in existing licensees.[36] The introduction of accelerated

[32] Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – Finance Annex', 18 July, para. 6.40.
[33] Ibid., para. 6.61.
[34] Ibid., para. 6.76.
[35] Ibid., para. 6.93.
[36] We note that prospective growth in relation to the energy transition, such as investments in hydrogen, are likely to be transferred to hydrogen business model RAVs in the future. See Ofgem (2024) 'RIIO-3 Sector Specific Methodology Decision – Overview Document', 18 July, para. 4.45; Ofgem (2024), 'RIIO-3 Sector Specific Methodology Decision – GD Annex', 18 July, paras 1.11–1.12.

depreciation will put further upward pressure on dividends, as it will result in the GDNs generating more cash in the short to medium term.

3.46 To ensure consistency between the different parameters of the regulatory settlement, we recommend that Ofgem adopts a framework where its assessments of the investability and the financeability of networks incorporate an approach to dividends that is flexible to the cash being generated by the business as well as to the downward pressure on the RAV growth profile expected for the sector. For the gas networks in particular, this will involve increasing the dividend yield assumption compared to RIIO-2: this suggests that the 3% dividend yield assumption currently being considered by Ofgem is insufficient.

3.47 Overall, it would be appropriate for Ofgem to allow an unrestricted return of cash to shareholders, subject to pre-set and mutually understood financial resilience constraints. These constraints should be reasonable, and should avoid trapping excess cash into the networks.

4 Comparison of dividends of European gas and electricity networks

4.1 In this section we build on the principles outlined above and assess recent empirical evidence on dividend yields and payout ratios of traded European gas and electricity networks (see further, section 4.1, below).[37] Our objective is to test whether there is support for the hypothesis that dividend policies in gas and electricity need to diverge.

4.2 We also place this analysis into the context of gas and electricity network asset growth, and test the link between the RAV growth and dividend payouts anticipated in the previous section (see further, section 4.2, below).

4.3 We analyse data from 2018–23. Table 4.1 outlines the sample of the assessed networks.

Table 4.1 Network companies sample for dividend analysis

Company	Primary sector	Primary location
Gas networks		
Enagás	Gas transmission	Spain
Italgas	Gas distribution	Italy
Snam	Gas transmission	Italy
Electricity networks		
Elia	Electricity transmission	Belgium and Germany
Red Eléctrica	Electricity transmission	Spain
REN[1]	Electricity transmission	Portugal
Terna	Electricity transmission	Italy

Note: [1] For the purpose of this analysis, we are classifying REN as an electricity transmission network operator primarily, although we note that the company is also a gas transmission and distribution network operator. According to REN's 2023 accounts,

[37] We also considered the value of share repurchases. We have used the Bloomberg field 'BS_TOT_VAL_OF_SHARES_REPURCHASED'. For the companies in our sample, this does not yield any share repurchases during the period of analysis.

sales generated by its electricity activity are almost twice as high as those generated by its gas activity. See REN, 'Integrated report 2023', p. 255.
Source: Oxera.

4.4 The sample is based on our cost of equity work for the Energy Networks Association,[38] where we use Enagás, Italgas, National Grid, Red Eléctrica, Snam, and Terna as energy networks. We deviate from that sample for the following reasons.

- National Grid has had a mixture of gas and electricity operations during the assessed period, therefore cannot be attributed to either of the sectoral subsamples.
- We do not rely on evidence from Elia and REN in the ENA work because we assessed them to be relatively illiquid and relatively low risk. However, we do not consider these factors to be as critical for dividend assessment as they are for the beta assessment, and therefore keep them in the sample for this analysis.

4.1 Dividend yields and payout ratios

4.5 We start by assessing dividend yields (in section 4.1.1) before moving on to assessing payout ratios (in section 4.1.2).[39]

4.1.1 Dividend yield

4.6 In this analysis, we define the dividend yield as a ratio of the dividend payment over market capitalisation, i.e. market value of equity capital.

4.7 Our initial findings (illustrated in Figure 4.1 below) provide a dividend yield range of **5.3–7.4%** for the gas networks and of **4.1–4.8%** for the electricity networks during the period 2018–23.

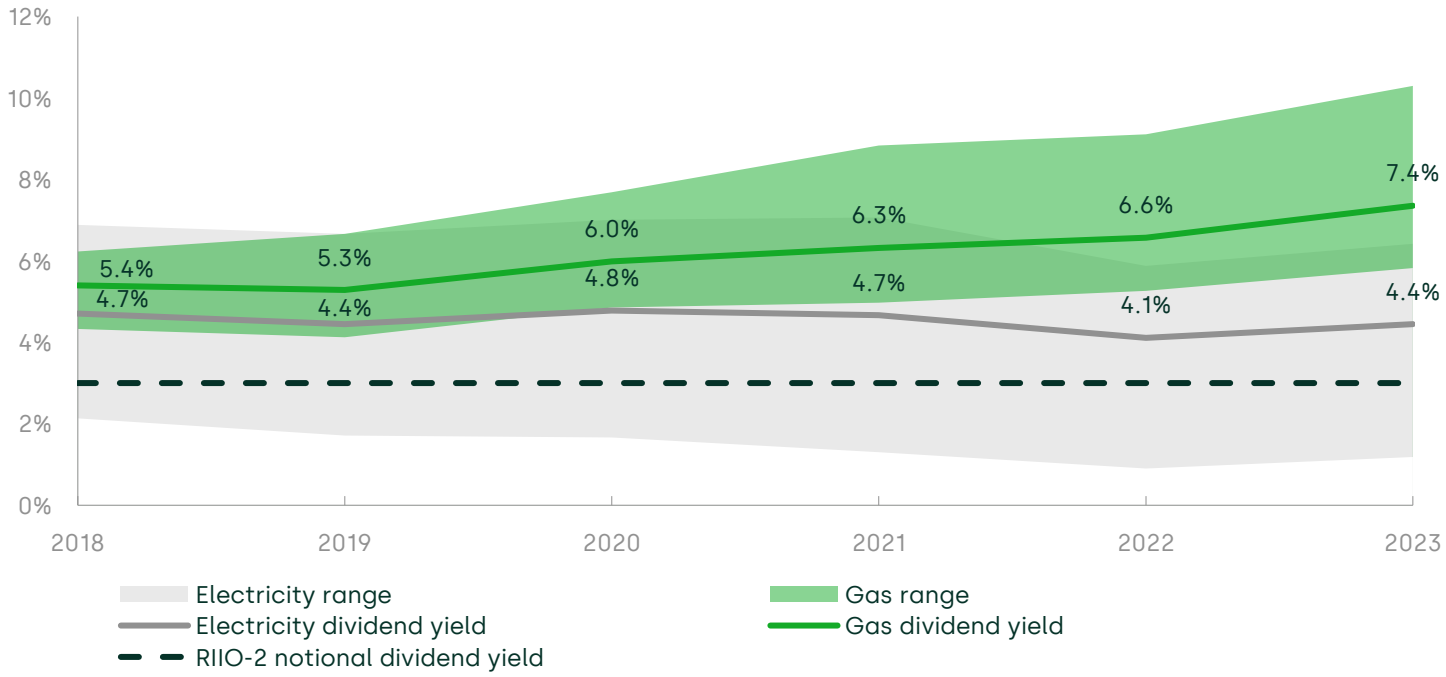
4.8 Notably, in recent years, on average, gas networks have consistently increased their dividend yield from **5.3%** in 2019 to **7.4%** in 2023, while electricity networks have kept their dividend

[38] Oxera (2024), 'RIIO-3 cost of equity. Prepared for Energy Networks Association', 23 February, Table 2.11.
[39] In our analysis, we do not adjust the dividend yield and dividend payout metrics to account for differences in gearing between the different companies in the sample and that of the notional company. We consider that the impact of gearing on dividend metrics is uncertain (for example, firms can target specific payout ratios that do not vary with gearing, even though highly geared companies will tend to be more constrained in their ability to pay dividends).

yield relatively constant over the same period, between **4.1%** and **4.8%**.

4.9 On average across the sample, the dividend yield has been consistently higher for gas than for electricity networks and the gap has widened in recent years.

Figure 4.1 Dividend yield of European listed gas and electricity networks



Source: Oxera analysis based on Refinitiv data.

4.10 These observations are consistent with the conceptual discussion presented in sections 2 and 3, and support the view that gas networks require greater flexibility in their dividend policies and potentially a higher yield.

4.1.2 Payout ratio

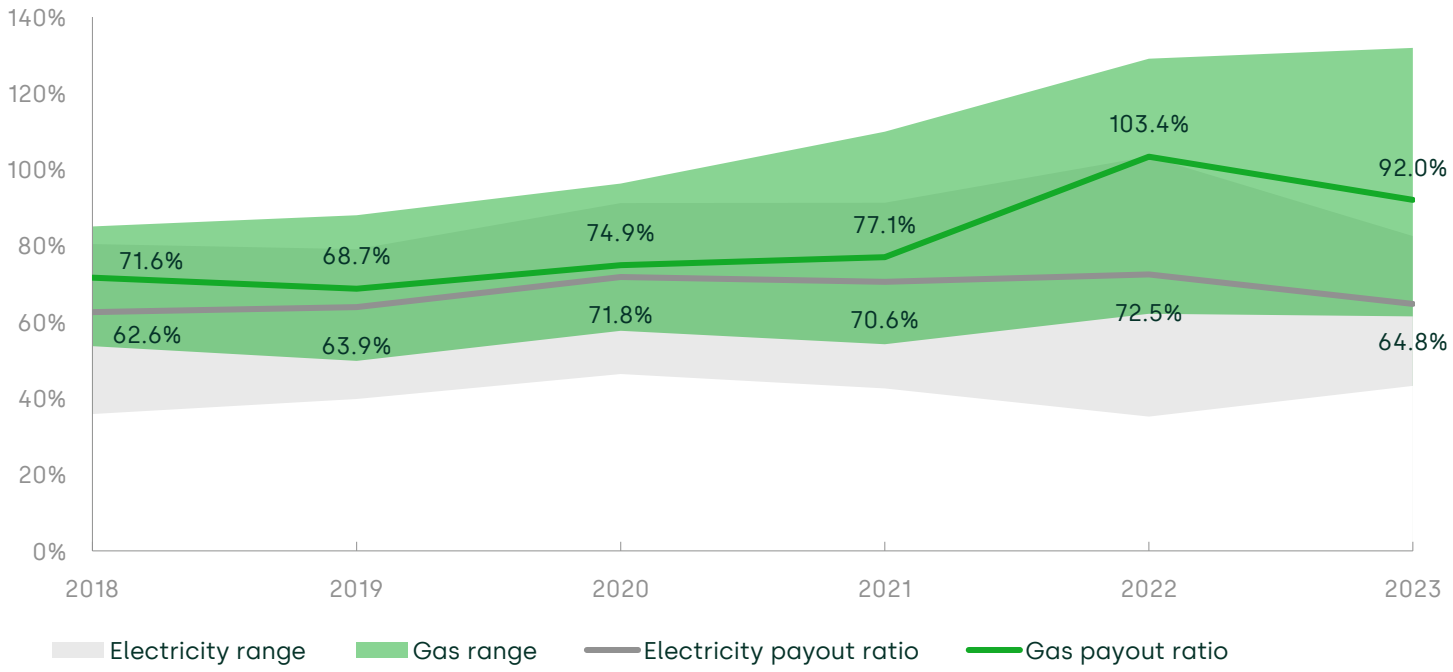
4.11 A payout ratio is a dividend payment over the funds available for distribution, i.e. the net income for the same period.

4.12 Figure 4.2 below shows that the payout ratios of the gas networks were also higher on average than those of the electricity networks.

4.13 In more recent years, gas networks' dividend payout ratios were at **103.4%** in 2022 and **92.0%** in 2023, i.e. higher than in the preceding years (**68.7–77.1%**), while electricity networks' payout ratios were at **72.5%** in 2022 and **64.8%** in 2023, which is broadly consistent with the level at the beginning of the assessed period—**62.6–71.8%** in 2018–21. Overall, the gap between gas and electricity networks' ratios has widened, which is consistent with observations for dividend yields, even though the payout ratio ranges of the two sectors overlap to a greater extent than the dividend yield ranges.

4.14 These findings also support the hypothesis that gas network companies may require to pay out higher dividends than electricity network companies, in particular when considering the dividend distributions of the networks in more recent years.

Figure 4.2 Payout ratio of European listed gas and electricity networks



Source: Oxera analysis based on Refinitiv data.

4.2 Setting dividend distributions into context with asset growth

4.15 To put the dividend payment practices into context, we have added the data on the growth rates of fixed assets (as a proxy

for RAV) of the networks into our analysis.[40] Figure 4.3 and Figure 4.4, below, show the trends in dividend yield, payout ratio, and fixed assets growth.

4.16 In general, over the past six years, electricity networks tended to invest more in fixed assets, leading to a higher growth rate in fixed assets compared to the gas networks.

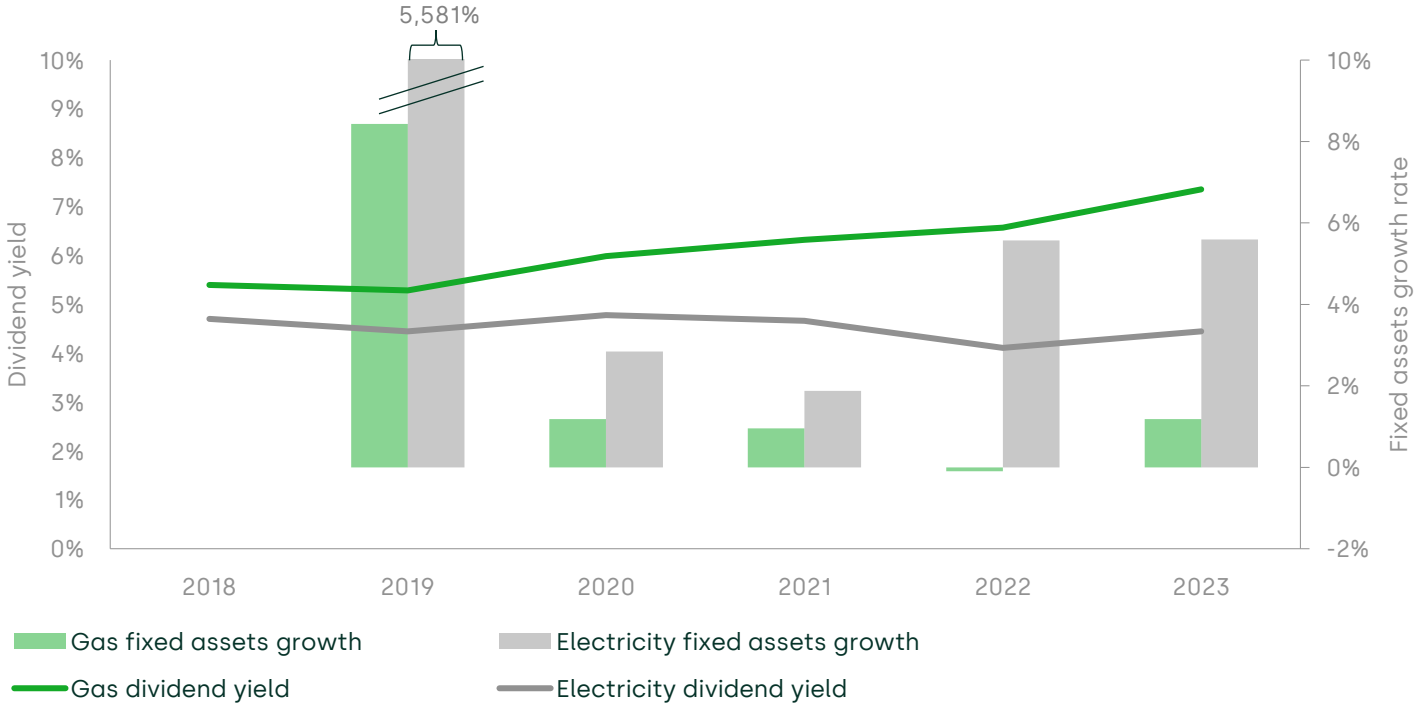
4.17 This trend matches the stable dividend yields of electricity networks and the relatively high and increasing dividend yields of gas networks.

4.18 We also note that the fixed assets growth of the gas networks has been quite low since 2020, and even negative in 2022—as discussed in section 3.1, a negative fixed assets growth (which would proxy a negative RAV growth rate) would likely lead to even higher upward pressure on dividend yields.

4.19 A similar conclusion can be drawn from the comparison of fixed assets growth and payout ratios, where the payout ratios in the electricity sector in 2023 appear to be broadly consistent with the level observed at the beginning of the period.

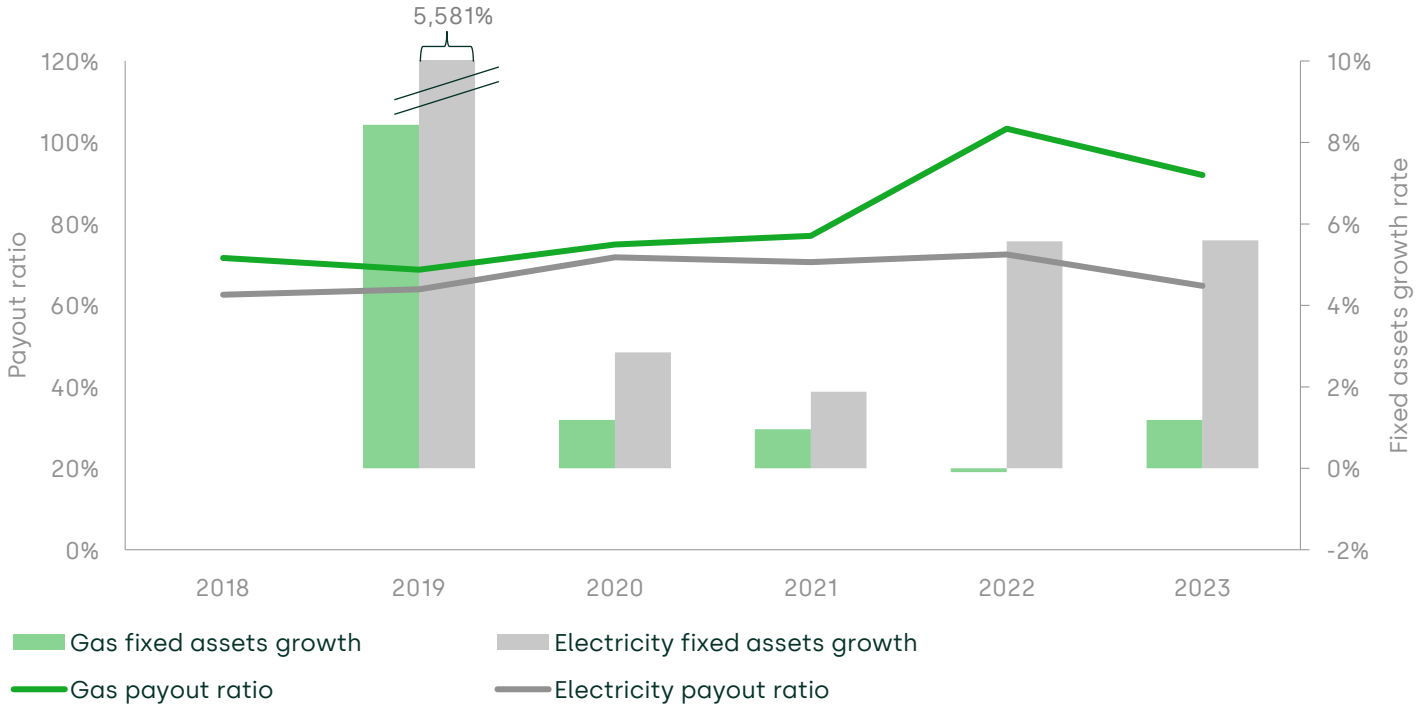
[40] Fixed assets are approximated by the 'Property, Plant & Equipment – Net' metric in Refinitiv. Proxying RAV growth by property, plant and equipment growth implicitly assumes that a net increase in the book value of property, plant and equipment assets happens proportionately to a net increase in the value of the RAV.

Figure 4.3 Dividend yield and fixed assets growth



Note: The fixed assets growth rate in 2019 for electricity networks is higher than shown by the bounds on this chart (it is at 5,581%) because of REN increasing its fixed assets substantially.
Source: Oxera analysis based on Refinitiv data.

Figure 4.4 Payout ratio and fixed assets growth



Note: The fixed assets growth rate in 2019 for electricity networks is higher than shown by the bounds on this chart (it is at 5,581%) because of REN increasing its fixed assets substantially.
Source: Oxera analysis based on Refinitiv data.

4.20 Most notably, this analysis provides evidence to support the relationship between slowing asset growth and increasing dividend yields.

4.21 As discussed in section 3.1, it is likely that gas networks' asset growth may be lower in RIIO-3 and subsequent price control periods than it was in the past and than it will be for the electricity sector. In this context, we expect the need for divergence between dividend policies in the two sectors and the need for increased flexibility in the dividend policy for the gas sector in particular.

5 Conclusions

5.1 In this report, we have assessed how dividend yields may be expected to evolve over the RIIO-3 price control and subsequent regulatory periods and the implications for Ofgem's regulatory decisions.

5.2 We conclude the following.

- Conceptually, dividends may be under pressure to increase as a result of lower required investments that would be able to sustain dividend growth in the long term. Any increased cash flow from the potential introduction of accelerated depreciation would also tend to have a depressing impact on gearing and, in order to maintain levels of gearing, dividends would need to increase accordingly. Indeed, an important purpose of any introduction of accelerated depreciation would be to return capital to shareholders, which itself implies higher levels of dividends being distributed.
- As a result of these dynamics, we recommend that Ofgem ensures consistency between the different elements of the regulatory package, the economic context, and shareholders' expectations by allowing for increases in required dividend yields in its financeability and investability assessments, and to ensure adequate calibration of the regulatory package.
- We also reviewed empirical evidence suggesting that the trends in dividend yield and dividend payout ratios are diverging between European gas and electricity sectors, with gas sector dividend yields increasing in recent years. This evidence supports our conceptual argument, and further supports Ofgem differentiating appropriately between the gas and electricity sectors when carrying out its financeability and investability assessments, in assuming a higher dividend yield for the gas sector.

A1 Appendix

Table A1.1 Annual gearing levels of European gas and electricity networks (2018–23)

	2018	2019	2020	2021	2022	2023
Gas networks						
Enagás	46%	44%	42%	46%	46%	44%
Italgas	49%	46%	52%	52%	54%	59%
Snam	47%	43%	46%	46%	44%	45%
Gas average	**47%**	**45%**	**46%**	**48%**	**48%**	**49%**
Electricity networks						
Elia	53%	51%	48%	49%	30%	37%
Red Eléctrica	36%	35%	44%	43%	38%	40%
REN	62%	61%	63%	61%	52%	57%
Terna	45%	41%	41%	42%	38%	37%
Electricity average	**49%**	**47%**	**49%**	**49%**	**40%**	**43%**

Source: Oxera analysis based on Bloomberg data.

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