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BALANCE SHEET PROVISIONS AS AN INSTRUMENT FOR SHAPING PROFIT/LOSS – THE CASE OF POLISH ENERGY COMPANIES

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Purpose: The aim of this article is to assess the impact of balance sheet provisions on the profit/loss of Polish companies in the energy sector.
Methodology: The research employs a quantitative analysis of financial statements and management reports from 12 energy companies listed on the Warsaw Stock Exchange, covering the years 2020-2024. The sample includes both large and smaller firms to enable comparison. The analysis focuses on: (1) the structure and types of provisions, (2) their share in total liabilities and balance sheet total, and (3) their impact on profit or loss. A literature review and analysis of IAS provide theoretical support.
Findings: Provisions play a key role in shaping financial outcomes, especially in the largest companies. Industry-specific provisions (e.g., for decommissioning and emissions) became more significant between 2021 and 2023, reflecting rising market and regulatory pressures. Large companies demonstrate more consistent provisioning policies, while smaller firms show greater variation.
Research limitations/implications: The study is limited to publicly listed Polish energy companies. Results may not generalise to private or foreign-owned entities. Disclosure quality varies, potentially affecting comparability. Future research could expand to EU comparisons or investigate the link between provisions and market value, especially in the context of ESG integration.
Practical implications: The study highlights the importance of transparent provisioning practices for financial stability, stakeholder confidence, and compliance with IFRS. It supports enhanced monitoring by regulators and improved internal risk management procedures in energy firms.
Social implications: The findings illustrate how financial provisions relate to environmental responsibility. They may inform policy debates on sustainability reporting and improve public trust in energy firms' transparency and ESG alignment.
Originality/value: This study offers a current, sector-specific analysis of balance sheet provisions in a high-risk industry. It contributes to academic and professional discourse on financial reporting, risk management, and corporate accountability, particularly within the evolving regulatory landscape.
Keywords: balance sheet provisions, profit or loss management, energy sector, earnings transparency.
Category of the paper: Research paper, case study.

1. Introduction

To ensure high standard of publication, Provisions for liabilities represent a critical element of an entity's financial statements. According to IAS 37 (§10), they reflect future obligations that are probable, estimable, yet uncertain in terms of their timing or amount (Dobija, 2015). These provisions play a central role in shaping financial results by influencing both the stability of profits and the entity's ability to respond to unforeseen events. Their recognition, typically through cost or revenue entries, directly affects gross results and, consequently, enterprise profitability (Niemczyk, 2000; Duraj, 2003).

The obligation to establish provisions is primarily derived from the going concern principle, which underscores the necessity of ensuring operational continuity by anticipating and mitigating future adverse consequences of current events (Walińska, Bek-Gaik, 2012; Chluska, 2001). From an accounting perspective, provisions are fundamental to the application of prudence and the reliability of financial statements.

However, the opacity or misvaluation of provisions may distort reported financial outcomes and misrepresent a company's financial position. This has particular implications for stakeholders such as creditors, investors, and tax authorities (Uwibambe, Njenga, 2025). Beyond their role in safeguarding financial transparency, provisions also function as tools for earnings management. Thus, their accurate valuation and presentation are essential for a true and fair view of financial performance.

Provisions are a very important instrument of accounting policy that can be used to manage the financial result (within the limits of applicable legal norms) (Dendru, Joo, 2025; Yang, Xiang, 2025). Although provisions are designed to enhance financial stability, their excessive or unjustified application can obscure the actual financial condition of a firm. The inherent flexibility in provisioning makes it a potential area for manipulation—such as concealing actual cost levels—which can mislead users of financial statements (Arnold, Collier, 2007; Suer, 2014). Provisions may be used to:

- offset unexpectedly high profits through the creation of excessive or inflated reserves,
- artificially inflate reported profits by underestimating or omitting necessary reserves (Sood, Abou, 2012).

Properly accounting for provisions not only enhances the quality of financial information but also informs the decisions of investors and regulators—particularly with regard to long-term liabilities and financial resilience in strategic sectors such as energy (Jaruga, Kabalski, 2013; PwC, 2021). Provisions therefore serve a cushioning function for financial performance, counteracting its volatility, and at the same time increase transparency and compliance with international reporting standards (Kiziukiewicz, 2020; EY, 2022). Transparency in the recognition of reserves is a key condition for the reliability of financial information.

An analysis of the available literature indicates that although the topic of the impact of provisions for liabilities on the financial result is not often analyzed directly, it is inextricably linked to broader studies in the context of managing the financial result, assessing the transparency of financial statements, balance sheet policies, asset and liability management, and corporate financial strategy.

The significance of provisions is particularly pronounced for companies operating in environments characterised by economic instability, fluctuating commodity prices, regulatory uncertainty, and environmental obligations. One of the sectors most exposed to such volatility is the energy industry (Dobija, 2015; IAS 37). In light of the war in Ukraine, balance sheet provisions in the energy sector have gained increased importance. They have become essential mechanisms for stabilising both the financial condition of companies and the broader energy security of nations. The armed conflict has disrupted energy commodity supply chains, driven up prices, and heightened political and regulatory risks. These developments have directly affected the operational risk profiles of companies in the energy sector. Under such circumstances, balance sheet provisions have emerged as a key tool for managing risk and earnings.

Given the specific nature of their operations, energy companies typically report a broad range of provisions that support the integrity of financial reporting and protect stakeholder interests. Among the most important are provisions for the decommissioning of infrastructure, site restoration, environmental obligations, litigation, and loss-making contracts (Walinska, Gad, 2017; KPMG, 2020; Giannuzzo, 2025). These provisions are particularly common in the energy industry due to its capital intensity, long asset lifecycles, and substantial environmental and contractual obligations. The most frequently reported categories include (Krupka, 2021; Karyy, Voskalo, 2021; Pylypenko et al., 2023):

- Decommissioning provisions: Cover future costs related to the dismantling of energy infrastructure (e.g., coal, wind, or nuclear power plants) and site rehabilitation. These are typically environmental liabilities mandated by law.
- Provisions for warranties and maintenance: Relate to equipment and infrastructure under warranty or subject to post-delivery service obligations, particularly in contracts involving ongoing maintenance.
- Provisions for onerous contracts: Applied when the fulfilment of a contract is expected to result in a loss, such as unfavourable long-term power purchase agreements (PPAs).
- Provisions for litigation and claims: Arise in the event of disputes with suppliers, contractors, or regulatory authorities (e.g., environmental agencies), when the likelihood of compensation or penalties is high.
- Provisions for employee benefits: Include obligations for retirement benefits, long-service awards, and other long-term benefits, which are often significant in labour-intensive energy firms.

- Provisions for emission and environmental charges: Address future liabilities under carbon emission schemes (e.g., EU ETS) or other environmental regulations. If allocated CO_2 allowances are exceeded, a provision must be recognised for the purchase of additional permits.
- Provisions for taxes and public liabilities: Include uncertain tax positions, particularly regarding interpretations of tax regulations concerning depreciation, subsidies, or deductions specific to the energy sector.

In summary, balance sheet provisions in the energy industry serve dual functions: they hedge against operational risk and support both investment planning and systemic stability. Numerous authors have highlighted their strategic importance not only for net income but also for liquidity, risk management, and long-term planning within a volatile energy landscape (Mikkelson, Partch, 2003; Borzemska et al., 2013; Battiston et al., 2017; Curtin et al., 2019).

A review of existing research indicates that the direct impact of provisions on profit/loss has not been widely addressed. Most studies approach the issue of provisions within broader discussions on asset and liability management, financial decision-making, and the transparency and reliability of financial reporting. Scholars consistently emphasise that properly recognised provisions contribute to a more accurate and realistic reflection of financial performance over time. Their accurate valuation and disclosure enhance the credibility of financial statements and facilitate a more informed assessment of a company's financial condition (Peek, 2004; Arnold, Collier, 2007; Cohen, 2011; Hońko, Kufel, 2011; Walińska, Bek-Gaik, 2012; Khraścina, 2015; Klimczak, 2016; Maszczak, 2017; Lehenchuk et al., 2020; Abdrakhmanova et al., 2021; Bialas, Gierusz, 2023; Durney et al., 2024; Ghitti et al., 2024; Vlčko, Meluchová, 2024). Some researchers analyse the internal and external determinants of provisions, treating them as tools for influencing financial performance (Zalilova et al., 2024). Others examine their importance from the perspective of stakeholders and their ability to interpret and rely on financial statements (Chluska, Poniatowska, 2018; Zhukova, 2020). Additional studies link provisions to profitability management **(**Novanda, Rostina, 2024; Sangawi et al., 2024) and to the processes of strategic planning and management (Kazakova et al., 2020; Chen, Shan, 2024).

A second stream of literature adopts a microeconomic or sectoral approach, focusing on provisions within specific industries. Most of these studies centre on the banking (Siegel, 1981; Primus, 2013; Aroghene, Onuorah, 2024) and insurance sectors (Barker, 2004; Ramos-Pérez et al., 2022; Bressan, Du, 2024). Synthesising these findings, one can conclude that provisions are an effective instrument for managing profits, with their importance growing in correlation with industry risk profiles. The greater the uncertainty, the more critical provisions become in financial management. Appropriately structured reserves help cushion the financial impact of adverse market conditions and contribute to a more accurate evaluation of financial health, regardless of the sector (Mikkelson, Partch, 2003; Borzemska et al., 2013). Cross-sectoral comparisons suggest that companies with larger, better-managed provisions tend to display

greater financial flexibility and resilience in the face of uncertainty, such as during economic crises (Bleck, Liu, 2007; Gmytrasiewicz, 2002; Kobryń-Król et al., 2013; Kaluzinska, 2014).

Surprisingly few studies focus specifically on the energy sector. Those that do often examine provisions in the context of liability structure, project efficiency, and financial decision-making in energy companies (Hadala, 2013; Dendru, Joo, 2025; Uwibambe, Njenga, 2025; González, 2025; Yang, Xiang, 2025; Karountzos, 2025; Giannuzzo, 2025).

Some publications explore the relationship between liabilities (including provisions), debt structure, and key financial indicators such as liquidity and solvency in energy firms (Smith, Dyckman, 1981; Aboody, 1996; Battiston et al., 2017; Curtin et al., 2019).

Only a limited number of studies directly examine the relationship between the obligation to recognise provisions and the financial performance of energy companies. Notable contributions in this area include works by Joskow (1998), Pourjalali, Wilde (2009), Kumor, Poniatowska (2015), Bernardini et al. (2018), Baran et al. (2022), Bialas, Gierusz (2023), Dorigoni, Anzalone (2024).

From this literature review, it is clear that there remains a gap in recent empirical research concerning the role of provisions in the financial statements of energy companies. Given the prolonged period of economic uncertainty affecting the industry, this gap provides a strong rationale for further investigation. Accordingly, the purpose of this study is to assess the impact of balance sheet provisions on the profit/loss of Polish energy companies. This impact is analysed in two dimensions: (1) the share of provisions in total balance sheet liabilities, and (2) the influence of expenses and income arising from the creation or reversal of provisions on the financial result. The central research hypothesis posits that between 2021 and 2024, provisions became increasingly important as a performance-related accounting category and that costs and revenues from provisions were significant components of reported profit/loss.

In order to achieve the research objectives, a multifaceted methodology was used, including an analysis of IAS regulations and a review of scientific literature. In addition, synthesis and deductive reasoning methods were used, which allowed for an assessment of the impact of provisions on profit/loss and the formulation of conclusions regarding the practical significance of provisions as an accounting policy tool. The empirical study used quantitative analysis of financial statements and management reports of all energy companies listed on the Warsaw Stock Exchange. The research sample includes both large and smaller companies to enable comparison of results in the analysed area.

2. Methodology

The research was conducted on a sample of Polish companies listed on the Warsaw Stock Exchange and classified within the "energy" sector. The sample includes 12 companies, which were divided into two groups. The first group consists of the four largest entities in the sector, which collectively account for approximately 80% of the energy distribution market, measured by the volume of energy delivered. The second group comprises the remaining, smaller companies operating in the energy sector. This division allows for a comparative analysis between large energy companies and smaller entities within the same industry. It should be noted that all surveyed companies presented information on reserves in their financial statements.

All companies in the sample disclosed information on provisions in their financial statements, making them suitable for analysis. A list of the companies included in the study, along with the designations used for the purposes of the analysis, is presented in Table 1. The companies are ranked according to size, based on total assets reported in their 2024 financial statements.

Table 1.
Companies Included in the Study

Name of Company	Symbol
Largest companies	
PGE Polska Grupa Energetyczna S.A	A-1
Tauron Polska Energia S.A.	A-2
Enea S.A.	A-3
Energa S.A.	A-4
Other companies	
Polenergia S.A.	B-1
Zespół Elektrociepłowni Wrocławskich Kogeneracja S.A.	B-2
ZE PAK S.A.	B-3
Onde S.A	B-4
Columbus Energy S.A.	B-5
ML System S.A.	B-6
Novavis Group S.A.	B-7
EC Będzin S.A.	B-8

Source: own work.

For the purpose of the study, financial statements and management reports for the period 2020-2024 were analysed. The data were sourced from the National Court Register as well as from publicly available reports on the companies' websites.

To achieve the research objectives, a multi-method approach was employed, including: analysis of relevant accounting regulations (IAS and IFRS), a review of the academic literature, examination of the financial statements of selected companies.

Additionally, methods of synthesis and deductive reasoning were applied to assess the impact of provisions on financial performance and to enable comparisons between the largest companies and smaller entities in the sector.

3. Results of the Research

3.1. Titles of Provisions Created by Energy Companies

An analysis of the balance sheets and accompanying notes in the financial statements of the selected companies enabled the identification of the most frequently reported types of provisions. These were categorised into four main groups:

- deferred income tax provisions,
- provisions for employee benefits,
- industry-specific provisions,
- other provisions.

Table 2 presents a detailed breakdown of the specific types of provisions reported by each company within the identified categories.

Table 2.
Titles of Provisions Reported by Companies

	Company symbol											
Titles of provisions	**A-1**	**A-2**	**A-3**	**A-4**	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8
Deferred income tax provisions	**x**	**x**	**x**	**x**	x	x	x	x	x	x		x
Provisions for employee benefits	**x**	**x**	**x**	**x**	x	x	x	x	x	x		x
Retirement and disability severance pay	**x**	**x**	**x**	**x**	x	x	x	x	x	x		x
Jubilee awards	**x**	**x**	**x**	**x**	x		x					x
Coal allowance	**x**						x					
Energy ta riff	**x**		**x**	**x**								
Bonuses and awards	**x**	**x**	**x**	**x**	x	x	x		x	x		x
Contributions to the ZFŚS	**x**	**x**	**x**	**x**		x						x
Medical care	**x**					x				x		
Death benefits	**x**	**x**	**x**	**x**		x	x			x		x
Unused holiday leave	**x**	**x**	**x**	**x**	x	x	x	x	x	x		x
Voluntary redundancy programme		**x**	**x**	**x**		x						
Industry-specific provisions	**x**	**x**	**x**	**x**	x	x	x		x			x
Costs related to the decommissioning of fixed assets	**x**	**x**	**x**	**x**	x	x	x		x			
Land reclamation costs		**x**	**x**				x					
CO_2 emisssions	**x**	**x**	**x**	**x**	x	x	x					x
Provision for the value of property rights intended for redemption	**x**		**x**	**x**		x						
Energy certificates of origin	**x**	**x**	**x**	**x**	x		x					
Provision for reduction of payments to customers		**x**	**x**									
Other provisions	**x**	**x**	**x**	**x**	x	x	x	x	x	x	x	
Disputed claims	**x**	**x**	**x**	**x**	x	x	x	x			x	
Non-contractual use of real estate and land	**x**	**x**	**x**			x						
Audit of financial statements							x					
Warranty repairs								x	x	x		
Other	**x**	**x**	**x**	**x**	x	x	x	x	x	x	x	

Source: based on the financial statements of the analysed companies.

The analysis shows that deferred income tax provisions and employee benefit provisions are the most common categories across nearly all companies in the sample. Only one company (B-7) did not report provisions in these two categories, instead listing only "other provisions". Within the employee benefits group, the most frequently reported items included: severance payments (retirement and disability), bonuses and awards, provisions for unused vacation leave. Within the category of industry-specific provisions, the most common items were: costs related to the decommissioning of fixed assets, land reclamation costs, provisions for CO_2 emissions. Industry reserves are not reported by three companies (B-4, B-6, B-7).

As for the group of other reserves, it should be noted that they are not created exclusively by company B-8. The most common title of other reserves are provisions for litigation claims and other reserves. Three companies (B-4, B-6, B-7) did not report any industry-specific provisions. In the "other provisions" category, all companies except B-8 reported items such as provisions for disputed claims, non-contractual use of land, warranty repairs, and miscellaneous items.

The table also reveals that larger companies (Group A) report a more diverse range of provisions compared to smaller companies (Group B), especially in the category of industry-specific provisions. Smaller entities tended to report fewer types of provisions or, in some cases, none at all in this category. This disparity may be attributed to the broader operational scope and more complex regulatory environments that larger companies must navigate, which necessitate more detailed and cautious provisioning policies. Additionally, no significant year-over-year differences were observed in the types of provisions reported, indicating stability in the titles and structure of provisions across the analysed period.

To assess the impact of provisions on profit/loss, it is also necessary to examine the structural composition of provisions. For this part of the analysis, the same four main groups were used. Table 3 presents the structure of provisions in the surveyed companies over the period 2020-2024.

Table 3.
Structure of Provisions by Companies (% Share of Total Provisions)

Group of provisions	**Company symbol**											
	A-1	**A-2**	**A-3**	**A-4**	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8
Deferred income tax provisions (%)												
2020	**1,83**	**10,75**	**8,92**	**31,55**	73,75	25,04	20,81	0,00	1,23	1,24	0,00	0,06
2021	**1,86**	**16,18**	**7,97**	**33,49**	79,59	20,64	1,80	54,38	0,00	9,00	0,00	0,00
2022	**3,50**	**19,93**	**6,21**	**22,58**	79,75	4,32	1,66	69,87	13,76	24,21	0,00	0,00
2023	**3,10**	**17,92**	**6,22**	**26,28**	43,76	23,56	1,79	64,68	0,00	23,80	0,00	0,00
2024	**3,20**	**17,45**	**6,11**	**25,78**	44,58	21,55	2,14	66,45	2,15	22,78	0,00	0,00
Provisions for employee benefits (%)												
2020	**17,40**	**25,62**	**22,00**	**31,18**	5,30	3,68	4,77	18,74	2,60	49,74	0,00	8,80
2021	**12,32**	**19,50**	**16,19**	**22,27**	4,45	2,93	3,07	5,40	25,99	18,12	0,00	1,80
2022	**8,70**	**9,73**	**11,15**	**13,12**	5,27	1,70	2,91	2,75	44,03	43,35	0,00	1,16
2023	**10,86**	**11,15**	**11,87**	**16,31**	4,53	4,14	4,16	2,05	30,72	11,76	0,00	1,12
2024	**11,24**	**10,87**	**11,25**	**14,87**	4,17	3,12	3,89	2,13	35,25	15,77	0,00	1,25

Cont. table 3.

Industry provisions (%)												
2020	**79,95**	**57,97**	**57,94**	**34,47**	15,32	57,32	66,21	0,00	24,15	0,00	0,00	91,14
2021	**83,10**	**60,76**	**66,18**	**41,52**	9,47	70,58	81,36	0,00	35,17	0,00	0,00	98,20
2022	**86,51**	**68,25**	**72,21**	**36,17**	11,12	71,25	88,29	0,00	0,00	0,00	0,00	98,84
2023	**82,51**	**60,24**	**74,74**	**43,74**	32,18	58,44	79,11	0,00	0,00	0,00	0,00	98,88
2024	**83,26**	**61,25**	**73,19**	**45,22**	28,47	60,54	81,22	0,00	0,00	0,00	0,00	98,75
Other provisions (%)												
2020	**0,82**	**5,65**	**11,14**	**2,80**	5,63	13,96	8,21	81,26	72,02	49,01	100,00	0,00
2021	**2,72**	**3,56**	**9,66**	**2,72**	6,49	5,84	13,77	40,22	38,84	72,88	100,00	0,00
2022	**1,29**	**2,09**	**10,43**	**28,13**	3,85	22,73	7,14	27,38	42,21	32,44	100,00	0,00
2023	**3,53**	**10,69**	**7,17**	**13,67**	19,52	13,85	14,94	33,27	69,28	64,44	100,00	0,00
2024	**2,30**	**10,43**	**9,45**	**14,13**	22,78	14,79	12,75	31,42	62,60	61,45	100,00	0,00

Source: based on the financial statements of the analysed companies.

The data indicate that among the largest companies (Group A), industry-specific provisions consistently constituted the dominant category throughout the period. In particular, Company A-1 reported more than 80% of its provisions in this group. Among smaller companies (Group B), the dominant categories varied:

- Companies B-5, B-6, and B-7 were dominated by "other provisions".
- B-2, B-3, and B-8 had a majority of industry-specific provisions.
- B-1 and B-4 showed a significant share of deferred income tax provisions, with B-4 also showing a high level of "other provisions".

In the years under review, the structure of provisions in individual companies did not change significantly.

In most companies, the structure of provisions remained stable throughout the study period. The three largest companies (A-1, A-2, A-3) displayed similar and stable structures, indicating formalised provisioning policies, likely driven by internal corporate standards.

Between 2021 and 2022, a decrease in the share of employee benefit provisions was observed in Group A companies (by 4-10 percentage points), coinciding with an increase in industry-specific provisions. Company A-4 also reported a notable increase in the share of "other provisions" during this period. Among smaller companies, similar trends were visible, with a few exceptions—e.g., B-5 saw an increase of more than 20 percentage points in employee benefit provisions in 2021.

These structural changes correspond to broader developments in the energy sector during 2021-2022, a period marked by energy market instability and significant regulatory transformation. Companies had to incorporate new contractual, environmental, and geopolitical risks into their financial reporting. This included provisioning for: price volatility in long-term contracts (e.g., PPAs), contract termination with Russian suppliers, compliance with the amended Energy and Climate Law, which introduced more stringent requirements related to EU ETS certificate purchases.

These factors contributed to the increase in industry-specific provisions during the 2021-2022 period.

3.2. Analysis of the Share of Provisions in Balance Sheet Total and Total Liabilities

Using data from consolidated financial statements, this section examines the share of provisions in balance sheet total and total liabilities. The analysis is presented separately for the four largest energy companies (Group A) and for the smaller companies (Group B). The results are summarised in Table 4.

Table 4.
Share of Provisions in Balance Sheet Total and Liabilities

Indicator/	Company symbol											
year	**A-1**	**A-2**	**A-3**	**A-4**	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8
Share of long-term reserves in total reserves (%)												
2020	**61,24**	**48,78**	**47,96**	**69,02**	96,96	36,84	51,11	100	1,26	46,60	0,00	6,11
2021	**41,56**	**42,94**	**38,88**	**60,51**	97,25	28,82	27,38	99,15	68,26	24,41	0,00	1,21
2022	**25,76**	**30,74**	**27,96**	**39,46**	95,73	8,80	28,27	95,37	29,73	45,89	0,00	0,74
2023	**31,71**	**30,63**	**29,31**	**43,61**	96,42	33,51	38,43	97,35	29,79	37,17	0,00	0,71
2024	**30,55**	**31,28**	**30,17**	**45,23**	97,11	34,28	40,88	96,51	30,47	35,92	0,00	0,72
Share of ahort-term reserves in total reserves (%)												
2020	**38,76**	**51,22**	**52,04**	**30,98**	3,04	63,16	48,89	0,00	98,74	53,40	100	93,89
2021	**58,44**	**57,06**	**61,12**	**39,49**	2,75	71,18	72,62	0,85	31,74	75,59	100	98,79
2022	**74,24**	**69,26**	**72,04**	**60,54**	4,27	91,20	71,73	4,63	70,27	54,11	100	99,26
2023	**68,29**	**69,37**	**70,69**	**56,36**	3,58	66,49	61,57	2,65	70,21	62,83	100	99,29
2024	**69,45**	**68,72**	**69,83**	**54,77**	2,89	65,72	59,12	3,49	69,53	64,08	100	99,28
Share of provisions in total liabilities (%)												
2020	**49,52**	**16,45**	**29,71**	**22,54**	6,31	28,42	77,93	0,92	30,90	0,86	2,24	25,23
2021	**53,01**	**16,30**	**30,56**	**24,05**	3,53	24,48	65,38	5,02	1,77	2,08	22,89	91,21
2022	**55,62**	**20,98**	**41,07**	**26,25**	4,63	34,61	52,47	6,36	0,83	1,59	9,07	92,45
2023	**51,94**	**21,23**	**41,77**	**19,29**	8,23	10,31	83,43	7,02	0,83	2,18	0,24	94,15
2024	**54,77**	**20,18**	**40,52**	**20,16**	5,22	14,65	72,42	7,01	0,81	2,07	0,87	93,47
Share of reserves in balance sheet total (%)												
2020	**23,12**	**10,23**	**16,69**	**12,52**	3,34	11,64	52,23	0,71	25,98	0,45	0,06	25,52
2021	**24,24**	**10,13**	**17,17**	**12,97**	2,36	11,15	55,03	2,09	1,49	1,30	13,22	190,45
2022	**27,03**	**13,29**	**23,36**	**15,13**	2,34	16,07	38,43	3,16	0,80	1,05	6,46	268,14
2023	**30,03**	**13,58**	**25,28**	**11,71**	3,33	5,65	39,01	3,37	0,88	1,44	0,16	386,06
2024	**30,22**	**12,57**	**23,69**	**12,69**	2,85	7,59	38,42	3,12	0,85	1,27	1,25	384,59

Source: based on the financial statements of the analysed companies.

Short-term provisions dominate the structure of provisions in the largest companies (Group A), consistently exceeding 50% of total provisions across all years analysed. In Group A, the share of short-term provisions increased in 2021–2022, reflecting a response to increased short-term operational and regulatory risks. In 2023, this share slightly decreased. A similar pattern was observed among smaller companies (Group B), although with more variation. Notably, B-1 and B-4 reported predominantly long-term provisions. The higher share of short-term provisions among most companies is consistent with the growing need to cover liabilities expected to materialise within 12 months due to increased uncertainty since 2021.

An analysis of the share of reserves in balance sheet total and total liabilities shows that reserves are a significant category of liabilities, especially in Group A companies. In this companies, provisions represent a significant share of total liabilities, ranging from 10% to 30% over the 2020-2024 period. Among smaller companies, B-3 and B-8 also report a high share of provisions in total liabilities. In B-8, the share exceeds 100% due to negative equity and persistent losses during the analysed period. For the remaining smaller companies (B-1, B-2,

B-4 to B-7), provisions were less significant relative to total liabilities. For the largest companies, the share of provisions in balance sheet total ranged from 10% to 30% across the period, underlining their importance in balance sheet structure. A clear upward trend in the share of provisions was observed in Group A companies from 2021, reflecting the heightened financial and regulatory uncertainty during that time. By contrast, in Group B companies, the share of provisions in balance sheet total varied considerably, with only a few companies (notably B-3 and B-8) showing provisions as a structurally significant balance sheet component.

The data indicate a distinct difference in the role of provisions between large and small energy companies. Group A entities exhibited greater consistency and a more cautious provisioning policy, likely due to their larger scale, greater exposure to systemic risk, and higher compliance requirements. From 2021 onwards, an increase in the share of provisions—both in balance sheet total and liabilities—was evident among these firms. This aligns with the broader macroeconomic and regulatory pressures affecting the energy sector during the post-pandemic and wartime periods.

3.3. Assessment of the Impact of Provisions on Profit or Loss

The final stage of the analysis focuses on assessing how the creation and reversal of provisions influenced companies' profit/loss. The recognition of provisions in a given year represents an expense that reduces the financial result, while the reversal (dissolution) of provisions increases the result as it is recorded as income. Table 5 presents the share of created and reversed provisions in relation to the companies' profit/loss.

Table 5.
Share of Created and Reserved Provisions in Profit/Loss (%)

Indicator/ year	Company symbol											
	A-1	A-2	A-3	A-4	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8
Share of provisions created in the financial result (%)												
2020	5018	67	4	299	2	171	311	2	7	1	2	120
2021	332	835	22	139	0	446	408	6	27	183	221	144
2022	654	2826	1642	289	3	343	616	11	5	2026	3	119
2023	511	384	1583	288	37	281	162	9	11	91	2	178
2024	598	407	1422	312	35	288	184	10	9	87	2	156
Share of dissolved provisions in the financial result (%)												
2020	104	8	1	39	1	0	5	0	0	0	0	0
2021	2	12	1	24	0	17	7	0	0	6	0	5
2022	12	66	49	12	1	3	37	3	0	61	0	0
2023	3	6	2	182	0	1	25	0	0	0	0	77
2024	2	7	2	155	0	0	22	0	0	0	0	57

Source: based on the financial statements of the analysed companies.

In the largest companies (Group A), the influence of provisions on profit/loss is significantly greater than in smaller entities. In every year and for all companies, the share of created provisions in the financial result clearly exceeded that of reversed provisions. This indicates that, overall, provisions are being used to reduce the accounting result. In some cases, the size of created provisions exceeded 100% of the financial result, meaning that without these provisions, the companies would have reported profits instead of losses—or vice versa.

Such levels of influence highlight the strategic importance of provisions in determining not only the magnitude but also the very nature of profit/loss in the energy sector. It should be noted, however, that created provisions are non-cash accounting expenses and do not impact the tax base.

Among smaller companies (Group B), about half (B-2, B-3, B-6, B-8) showed a similar pattern, although to a lesser extent. For the remaining smaller entities, the creation or reversal of provisions had a marginal effect on profit/loss.

Between 2021 and 2023, there was a noticeable increase in the influence of provisions on earnings, especially in the case of created provisions. This period was marked by an increase in operational, environmental, and regulatory risks, which required companies to update estimates and recognise new obligations. As a result, provisioning became a critical factor affecting reported profitability.

4. Discussion

The findings of this study align with the conclusions of previous research analysing the role of provisions in shaping financial performance. Across industries, provisions have consistently been identified as key components influencing earnings and enhancing companies' resilience to economic volatility. The results of this study confirm the growing significance of provisions in the energy sector, as noted by Kumor and Poniatowska (2015), Bernardini et al. (2018), Baran et al. (2022), Białas and Gierusz (2023), and Dorigoni and Anzalone (2024).

A common thread in the literature is the emphasis on the flexibility of provisioning and its implications for the reliability of financial statements. Recent research further underlines the correlation between external market shocks—such as fluctuations in oil prices or changes in environmental regulation—and the necessity to recognise provisions that directly impact net income.

Studies focusing on the largest Polish energy companies (Kumor, Poniatowska, 2015; Białas, Gierusz, 2023) have consistently demonstrated that provisions constitute a significant share of both total liabilities and balance sheet total. The levels reported in this study are comparable to those presented in earlier research. However, the current findings indicate that the importance of provisions has increased notably between 2021 and 2023.

These years were marked by substantial instability in the energy sector and major regulatory transformations. Companies were compelled to reflect new contractual, environmental, and geopolitical risks in their financial reporting practices. This led to a wider scope and greater value of provisions being recognised. Entities that were particularly affected included those dependent on fossil fuel imports and those with long-term supply contracts or high exposure to carbon-intensive assets.

Another important contribution of this study is the observation that industry-specific provisions now constitute the main category of reserves in large energy companies. This contrasts with earlier findings, which identified employee benefit provisions as the dominant type (Kumor, Poniatowska, 2015). This shift in focus reflects the evolving risk landscape in the sector.

Furthermore, this study expands on previous Polish research by incorporating smaller entities from the energy sector. While provisions also play a relevant role for these companies, the share of provisions in total liabilities and balance sheet total is more variable than in larger firms. This variability likely reflects differences in exposure to systemic risk, operational complexity, and access to internal accounting expertise.

5. Summary

Recent research confirms that provisions for liabilities—when properly classified, valued, and disclosed—play a critical role in shaping companies' profit/loss, particularly in sectors exposed to high levels of operational and regulatory risk. Provisions not only enhance the transparency and reliability of financial reporting but also constitute a significant component of liabilities on the balance sheet.

Their relevance is especially pronounced in the energy industry, where companies must account for environmental obligations (e.g., site remediation and CO_2 emissions), infrastructure decommissioning, contractual risks, and the potential impacts of legislative and tax changes.

The results of the research conducted, covering the years 2000-2024, confirm the important role of the policy of creating reserves as a tool for managing financial results, especially in times of economic crisis. They are similar to the results of research relating to earlier years of the financial crisis of 2008-2009 or 2014. It should be emphasised that different accounting regulations relating to reserves were in force during this period (especially in Central and Eastern Europe). Despite this, reserves were identified as a key tool for shaping profit/loss in conditions of increased risk (Šodan, Barać et al., 2013; Klimczak, 2013; Brähler, Schmidt, 2014; Kendirli, S., Çankaya et al., 2017). It has been proven that the creation of cost provisions during a crisis has a stabilising effect on operational activities and increases stakeholder confidence (Predko, 2016).

The results of studies relating to previous economic crises, as well as current research findings, indicate that the analysis of accounting reserves during a crisis is a key component in assessing the financial condition of companies, especially in industries that are sensitive to economic fluctuations, such as the energy sector. As shown by the research conducted for the purposes of this article, the years 2021-2023 saw:

- Sharp increases in energy commodity prices, driven by the COVID-19 pandemic, Russia's invasion of Ukraine, and global supply chain disruptions, introduced considerable cost and operational uncertainty.
- In response, companies were forced to revise estimates and create provisions for financial, contractual, and supply interruption risks.
- The acceleration of the energy transition towards renewable energy sources (RES), along with EU climate policies (e.g., Fit for 55, ETS reform), necessitated the recognition of new types of provisions—such as those related to abatement costs or the declining value of carbon-intensive assets ("stranded assets").

Consequently, between 2021 and 2023, the role of provisions in financial reporting significantly increased, both as a tool for performance management and as a prudential measure in a volatile regulatory and economic environment.

The growing strategic importance of provisions highlights the need for further in-depth research. Specifically, future studies should:

- Examine the long-term impact of different categories of provisions (e.g., environmental, regulatory, contractual) on financial stability and company valuation.
- Address the currently limited focus on the strategic function of provisions beyond short-term earnings management.
- Explore international differences in provisioning practices across jurisdictions and regulatory regimes.
- Investigate how provisions intersect with ESG reporting and sustainability frameworks, as they may serve as a bridge between traditional financial reporting and integrated reporting models.

Provisions are no longer solely accounting estimates. In the energy industry, they increasingly serve as a reflection of strategic risk management, financial prudence, and corporate responsibility in the face of uncertainty.

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