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Towards a Meaningful Understanding of Organizational Leaders' Localized and Contextualized Implementation of UNSDGs in Bahrain's Changing Energy Sector Businesses

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ABSTRACT

Despite Network Leadership scholarship's emphasis on localizing and contextualizing leadership practices during organizational change, there is a dearth in the current theoretical framings on “how” to address the implementation failure of localization and contextualization towards broader SDGs/organizational sustainability. This paper fills this gap by offering deeper insightful theoretical and practical understanding of how organizational leaders can address socio-economic and ecological sustainability concerns, and how a more meaningful reconceptualization and implementation of leadership practices can help Business and Management academics and practitioners address the organizational growth, human, and ecological well-being dilemma in the energy sector. By drawing on Network Leadership, SDG, organizational change literature and 26 senior leaders' semi-structured interviews, this study uses (Braun and Clarke's 2006) Thematic Analysis Procedure to resolve the theoretical and practical implementation lag in Business and Management scholarship. We contribute 4 novel implementation practices: (1) Operational; (2) strategic; (3) cultural and (4) interorganizational knowledge exchange alignment and a model on wider socio-economic-ecological well-being. Showing ‘what’ leadership characteristics are needed and “how” to meaningfully reconceptualize the dominant localization and contextualization model of organizational change towards broader sustainability goals has been practically and scholarly overdue.

JEL Classification: L, P4, Q, Q2, Q3, Q4, Q5, P28, Q01, L95

1 | Introduction

In 2015, the successful adoption of the 17 Sustainable Development Goals (SDGs), inadvertently/unintentionally created an academic boom leading to a localization and contextualization perception of organizational leaders' practices for firm growth and effectiveness (Uster, Vashdi, and Beeri 2022). While localization is generally defined as the application of leaders' local values and autonomy (Saz-Carranza and Ospina 2011) when dealing with sustainability challenges threatening their organizations' entrepreneurial and ecosystems' effectiveness

(Neumeyer and Santos 2018), contextualization, on the other hand, refers to a range of institutional culture, regulatory, leadership practices (O'Leary et al. 2024), geographic, regional and economic factors that may adversely impact on an organization's network/an ecosystem's socio-economic effectiveness (Uster, Vashdi, and Beeri 2022; Moore 1993) or its positive impacts on work, personality and commonalities between research settings (Johns 2018). Such a localization versus contextualization perception of SDGs in the literature and their implementation have been at the expense of human well-being and ecological sustainability (Hickel and Kallis 2020). This discourse has also

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Summary

- This paper examines the grand socio-economic-ecological sustainability challenges when energy sector business leaders try to implement the UNSDGs. We propose a reconceptualization of leadership that includes a new set of meaningful practices, which shows “how” to address wider sustainability constraints effectively.
- UNSDGs/Global Goals are a set of seventeen objectives intended as a blueprint for the promotion of worldwide equality, peace, and prosperity.
- Traditional Network Leadership is a set of interlinked, operational capabilities that leaders may use to address organizations’ resource constraints and inequalities.
- Strategic, Sustainable Network Leadership evinces four meaningful sets of leaders’ perceptions, enunciations, and practices on how a new set of capabilities and change processes can help to resolve wider socio-economic-ecological challenges.

led to the proliferation of the leadership capabilities needed for organizational growth (Moccia, Zhao, and Flanagan 2020), business models to support this development (Neumeyer and Santos 2018) and propositions for environmental, productivity, and profitability sustainability (Kallmuenzer et al. 2023). However, to date, there is a lack of a model on “how” leadership practices can meaningfully (and effectively) be implemented to achieve the wider socio-economic-ecologic concerns embedded within the SDGs in the Middle Eastern context. Additionally, while the scholarly works emphasize the organizational benefits arising from leaders’ practices (Millot, Krook-Riekkola, and Maïzi 2020) such as organizational productivity and business’ financial performance (Poddar and Narula 2018), they also expose the missing broader sustainability implementation link in leadership capacity (Barbagila et al. 2021), particularly when implementing changes related to the SDGs in the Middle East. Despite (Sharma, Mendy, and Shahzad’s (2022)) recognition of the wider leadership failures during strategic organizational change implementation to enhance business sustainability (Phillips 2018), the growing scholarly focus on theorizing (López-Concepción et al. 2022) and conceptualizing leadership practices (Wind, Klaster, and Wilderom 2021; Guandalini 2022; Harris et al. 2023) has led to a paucity of “how” leadership practices impact on strategic organizational change and sustainability/SDGs’ concerns in the Middle East.

While existing scholarly works on leadership (Uster, Vashdi, and Beeri 2022) have highlighted the importance of practices for local service delivery improvements in the energy sector (Millot, Krook-Riekkola, and Maïzi 2020) by using a localization and contextualization perspective, Davis et al. (2018) had earlier noted the scholarly gap in addressing the wider socio-economic-ecological challenges. Additionally, the dichotomized localization versus contextualization discourse has given rise to contradictions and confusions leading to lack of knowledge on “how” to resolve more strategic, human well-being and climatic sustainability issues (Hickel and Kallis 2020; Wijethilake et al. 2023; Rogelj et al. 2021). Consequently, we do not know

what types of meaningful leadership practices beyond financial risk management, and maintaining firms’ operational and profitability viability, organizations’ leaders need to address the global scale of the 17 SDG/sustainability challenges, particularly in the Middle Eastern context. We produce a model on how to meaningfully do so as part of an answer to earlier calls (Acciarini et al. 2024; Higgs and Rowland 2000). Therefore, to address the missing theoretical/conceptualization and implementation gaps and contribute to knowledge in this important area, this study asks the guiding question: “Which set of meaningful Network Leadership practices can leaders locally and contextually deploy when implementing wider socio-economic-ecological sustainability issues which have been strategically lagging in a rapidly changing energy sector in the Middle East?” We address the gaps raised by the research question as follows. Firstly, we develop a new Strategic, Sustainable Network Leadership model on how to apply localized and contextualized leadership practices for wider socio-economic-ecological reach. Secondly, we contribute to the growing theoretical and neglected empirical research and thirdly advance knowledge in these fields, using a combined contextualization (Johns 2018) and localization approach. Fourthly, via our model, and evidence-based themes (levels 1–4), we contribute a more embedded set of organizational leadership practices on how to address the implementation failure of the localization—contextualization perspective, the growth versus human well-being concerns, and the technical, operational, reactionary perspective (financial, technical, micro-organizational) versus the strategic, socio-economic sustainability orientation.

The recent surfacing of additional leadership capabilities such as Sales, Mansur, and Roth (2023) and Santos et al. (2023) flexibility, Weber, Büttgen, and Bartsch (2022) digital capability, (Asimakopoulou and Whalley’s (2017)) market demand satisfaction, Moccia, Zhao, and Flanagan’s (2020) technological know-how and Lindbergh et al. (2022) strategic awareness signal what extra qualities are needed to successfully operationalize organizational change. More importantly, they surface the failure of the localization and contextualization perspective to deal with the failure of leadership practices to deal with the poly-crises of change—that is, growth, financial viability, and sustainability issues (López-Concepción et al. 2022). Additionally, while Moccia, Zhao, and Flanagan (2020) have called for a more innovative model to address the core business growth agenda of the localization and contextualization perspective (Neumeyer and Santos 2018) the failure to fill such a gap is astounding (Maurya et al. 2021). While such a failure has been partly attributable to energy sector businesses’ resource utilization constraints, the additional failure to address climate damage/ecological issues has led to our selection and analysis of particularly Network Leadership to see how leaders’ actions and perceptions across networks of organizations within energy sector businesses (Strasser, de Kraker, and Kemp 2019) could be investigated on the sustainability concerns (Lindbergh et al. (2022)). We have additionally addressed the study’s key guiding research question by developing a Strategic, Sustainable Network Leadership model that contributes to the paucity of scholarship on the perceived localization and contextualization discourse and the broader application of leadership practices to effect meaningful and effective socio-economic and environmental sustainability for energy businesses (see SDGs).

Structurally, this paper's introduction is followed by an explication of the SDGs in relation to the existing scholarship, and the wider context of their enactment and leaders' capabilities. The scholarship on Network Leadership and how leadership practices may promote socio-economic good is examined, followed by the research methods and data analysis procedures. The findings are categorized into four thematic levels, which were used to develop our contribution of a Strategic, Sustainable Network Leadership model that seeks to reconceptualize the current localization versus contextualization and organizational growth versus human well-being discourse and promote a more socio-economic-ecological development in the Middle East.

2 | Theoretical Context

2.1 | SDGs Within Energy Sector Businesses

Existing literature on and around leadership, SDGs and organizational change is built mainly on leaders' abilities to localize and contextualize practices not only in India (Poddar and Narula 2018) but also in financial, technical, and operational activities in other change situations (Higgs and Rowland 2000). Further, while the 17 UN SDG framework/literature seeks to promote social coherence and justice (food, health, education services) and socio-economic and infrastructural equalities (e.g., net-zero, zero-poverty, zero-hunger), the pressure on the perceived localization and contextualization of leadership practices to achieve zero poverty (SDG1) through technically applying such practices in change situations (Feng et al. 2024; Weber, Büttgen, and Bartsch 2022; Poddar and Narula 2018), has created sustainable energy concerns (Olubodun 2021; see SDG7). Therefore, the failure of localized and contextualized leadership practices to facilitate a thriving sustainability ecosystem within the energy sector (Blazquez et al. 2020) has partly led to the current climate change crisis (see SDG13), and paradoxically accelerated global emissions and poverty (Rogelj et al. 2021; Kallmuenzer et al. 2023). Moreover, whether leadership practices should be orientated towards growth or human well-being, or ecological concerns remains unsolved (Hickel and Kallis 2020).

An additional (third) set of strategies have been surfaced to help resolve such failure during change. These require organizational leaders to (re)direct greater investments into training, education, and subcontracting (Millot, Krook-Riekkola, and Maizi 2020). While such leadership practices may temporarily boost local businesses, create jobs and increase (local) economic development (Hickel 2019; see SDG 8), leaders' contributions to social good (Lindbergh et al. 2022) remains elusive. In addition, the literature also promotes sustainable agricultural food security (SDG2), but production and packaging still rely on fossil fuel supplies and increased hydro carbonization. While SDG4 is concerned with providing quality education and access to learning and SDG6 promotes clean water and sanitation (like SDG1's end to poverty, SDG2's zero hunger, SDG3's good health, and SDG13's climate change), the quality of life (for organizational members) and leadership practices' contribution to alleviate ecological instability remains missing (also see SDG7). While meaningful production and consumption has been suggested (see SDG10 and SDG11), the complexities of the inter-related increases in global consumption (see SDG12) and population

spikes threaten on-land and below-sea ecosystems' balance (see SDG14 and 15), and strategic value creation (Phillips 2018). We therefore live in an era of a poly-crisis including global organizational, human, and ecological well-being instabilities (Zutshi et al. 2021), and the UN's legislative/governance framework (SDG16 and 17) has fallen short of meaningfully addressing the leadership, organizational change and SDGs/sustainability research lags particularly in energy sector businesses (Kørnø, Lyhne, and Davila 2020; Ite et al. 2018; Phillips 2018). Our research illuminates how social sustainability, as part of a wider socio-economic-ecological reconceptualization of the extant literature, can be promoted by energy company leaders (see Figure 1 below).

2.2 | Network Leadership

Network Leadership scholarship is the study's theoretical pillar due to its capacity to bridge localized clusters of organizational leaders implementing change practices for sustainable ends. Network Leadership oscillates between sole (localized) and more team-based (contextualized) leadership. (Azorin, Harris, and Jones 2020) notes how leaders should act as local change actors, while (Strasser, de Kraker, and Kemp (2019)) and (Turner and Baker (2018)) focus on the divide between organizational growth (and change) versus human well-being issues. While Shvindina (2022) bibliometrically analyzed more than 2000 articles and highlighted linkages between the perceived localization and contextualization of leadership practices and how effective organizations may evolve, their pointing to technical, leadership practices such as communication and shared responsibilities failed to address the wider non-technical, socio-economic-ecological concerns of the SDGs. This pervasive, scholarly neglect is this paper's interest/focus.

This includes an insightful and meaningful examination of the fine distinctions and attributes and practices, which current organizational leaders require and how strategic they are beyond the localization and contextualization discourse (Neumeyer and Santos 2018; Higgs and Rowland 2000; Moccia, Zhao, and Flanagan 2020). While references are made specifically to the Middle East given the paucity of scholarship in this area, this study's empirical findings could resonate with other settings and leaders' efforts in redressing resource utilization and sustainability (e.g., financial, human capability development, knowledge acquisition, and so forth). Relying on 586 network participants across Israel, Uster, Vashdi, and Beeri (2022) showed how leaders utilized their local authority to centralize service delivery although counter-effects (failures) of their localization and contextualization remain in Israeli and Arab-dominated areas. In their review of 163 empirical and conceptual studies, Wind, Klaster, and Wilderom (2021) tried to resolve the localization constraints by proposing distributed and shared leadership practices and a model. The latter includes leaders' abilities to consult, coach, connect, and catalyze their practices. However, leadership practice failure abounds in the wider socio-economic-ecological realm (Harris, Azorin, and Jones 2021).

It is also claimed that Network Leadership facilitates collaboration between leaders and organizational goals' achievement (Wind, Klaster, and Wilderom 2021). Consequently, while



FIGURE 1 | Energy Industry Contributions to SDGs. [Color figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

organizational change may happen (Leithwood 2019; Mendi, Rahman, and Bal 2020), it is not clear whether classical, hierarchical organizational structures provide the answer or whether the perceived localization and conceptualization of leadership practices is the panacea of what is needed to do so (Kallmuenzer et al. 2023; Silvia and McGuire 2010; Turner and Baker 2018). Additionally, network leadership practices are perceived as leaders' abilities to diffuse roles and exchange knowledge to address any paradoxes, confusions/dilemmas and problems arising from SDGs (Uster et al. 2021). Further claims that network leadership "advances...both theory and practice" (Cullen-Lester and Yammarino 2016, p. 174) has not been matched with the empirical, sustainability deficit (Phillips 2018). Additionally, while (Silvia and McGuire (2010)) postulates that "the network level approach to the study of networks [and localization and contextualization of leadership practices] is important", they acknowledge how empirically lacking the scholarship has been (p. 67). Based on the theoretical and empirical gaps identified from the literature, we argue, through our case study method choice and its implementation in the Middle Eastern context (see next section), that we could successfully answer the study's research question while helping to advance knowledge on how to implement leadership practices to meaningfully address wider socio-economic and cultural concerns raised by SDGs in the energy sector.

3 | Research Context

The energy sector is an interesting research area because it continues to not only contribute significantly to global economic development but is equally bedevilled with business sustainability, lives, and livelihood issues (Maurya et al. 2021; SDG 13). While pressures continue for the sector to provide affordable, reliable, and clean energy (SDG 7), the expectation that it should also fulfil a moral and ethical responsibility to

address human well-being concerns (Lindbergh et al. 2022), underscore an examination of the socio-economic and ecological viability pressures businesses have come under (SDG 15). Therefore, this research is conducted in Bahrain Energy industry, whose leadership have had to address similar concerns. Further, it was thought befitting to also consider how the leaders locally perceived and contextually applied their leadership practices using a diverse set of energy cases to highlight their socio-organizational impacts and the extent of how meaningful or otherwise these are for Business and Management research. Since the first discovery of oil in the GCC region in 1929, no scholarship, to date, has examined how the broader, more strategic application of leadership practices towards wider SDGs/sustainability issues could address the theoretical and empirical gaps evinced in the existing scholarship. Additionally, while Bahraini energy industry is undergoing multiple change initiatives aimed at addressing the SDG pressures, we do not know how meaningful the energy sector's leadership's intentions and actions are, how they can be captured and, how these can help to reconceptualize/contribute to Business and Management knowledge on the neglected wider socio-economic-ecological concerns.

To help ascertain the afore, this study is methodologically situated within interpretive logic (Saunders et al. 2018) to find out how organizational leaders perceived the localization and contextualization of their change-orientated practices using multiple case studies of key Bahraini oil and gas companies and the socio-economic and ecological effects of their enactments (Collins and Hussey 2021). The case study method was chosen as it permits research participants to share, challenge and extend established wisdom on the scholarly works' espoused technical-operational-financial practices of leaders (Bryman 2004; Antonakis et al. 2012), how their implementation was contextualized and localized, and the reasoning behind the organizational and social choices (Maurya et al. 2021;

Blazquez et al. 2020). Additionally, the choice of using the case study method enables the filling of the theoretical gap in leadership scholarship's incapacity to address the human well-being and ecological sustainability (Hickel and Kallis 2020) during large scale organizational change such as those that the Middle Eastern oil and gas sector leaders were faced with. Additionally, this study has been driven by the need for a novel framework that could meaningfully resolve this fundamental problem.

As a key oil producing country, with a population of 1.6 million (CEIC Data, 2023), Bahrain relies heavily on Bahraini Oil and Gas industry for its socio-economic development and environmental preservation. 8 top Bahraini Oil and Gas companies which constitute the unit of analysis for this study were selected not only for their significant contributions to the Kingdom's wealth, but it was also equally important to ascertain the extent to which leaders' actions and perceptions meaningfully complied with wider human and ecological sustainability issues. To be able to achieve this objective, 26 key energy companies' organizational leaders were selected because of their experience and knowledgeable insights into the UN SDGs. The increasing calls to embed these into their organizations' core operations necessitated our investigations into how their localized perceptions of the SDGs were practically translated in meaningfully resolving their respective organizational (case study) contextual sustainability issues.

3.1 | Mini Organizational Cases

Asry is a multinational Arab company in [Al Hidd, Bahrain](#). Founded in 1977 by seven [OAPEC](#) member countries, namely Bahrain, Kuwait, UAE, Iraq, Qatar, [Saudi Arabia](#) and [Libya](#) offering shipbuilding, offshore and vessel repair services. Its leadership was challenged to ensure that their various transformation projects including commercial operation automation, carbon emissions reduction and environmental safeguarding were not completed at the expense of staff and citizenry alike.

Bafco supplies aviation fueling services to Bahrain International Airport on behalf of Bafco, Chevron Asia Pacific, and BP, Middle East. While Bafco's leadership also had to automate operations, they were doubly challenged to digitalize efficiently and effectively in their pursuit of wider socio-ecological harmony.

Chevron's tremendous growth in the Middle East via business acquisitions, ongoing partnerships (e.g., Noble Energy and expansions in Saudi Arabia) and technological transfers, its organization's leadership know-how, has recently faced energy prediction, operational and environmental stewardship challenges in relation to sustainable human well-being.

Gulf Petrochemical Industries Company (hereafter GPIC), jointly owned by Bapco energies, SABIC Agri-Nutrients Investment, and Petrochemical Industries had to initiate a Carbon Dioxide Recovery (CDR) Project as its leaders sought to preserve wider environmental concerns.

Tatweer Petroleum, wholly owned by Noga, was challenged to diversify its operations and investments while addressing human and ecological challenges.

Banagas, (formally Bahrain National Gas Company), is a joint Bahraini, [Kuwaiti](#) and Chevron-owned company and its gas exploration expansion was also had to comply with international legal and environmental measures.

Bapco's commissioning in August 2021 of a new Resid Hyrdocracking catalyst technology, its upgrading of its Sitra oil refinery in 2019, and a \$5 billion capacity project with Chevron Joint Venture increase supplies from 267,000 to 380,000 [barrels/day](#) but its leadership came under pressure to address human well-being issues.

Having introduced HRM transformation and responsible resource consumption and procurement projects, Noga's leadership also had to rethink its climate change, transformation, and sustainability strategy to survive. While these measures required the selection of operationally and strategically knowledgeable leaders to provide the requisite insider case study knowledge of companies' operations (Glaser and Strauss 2017), it was equally important to deploy appropriate data collection tools to effectively do so. From the 8 chairpersons and 18 top CEOs and GMs.

3.2 | Data Collection

Semi-structured interview questions were used to elicit a range of responses covering organizations' leaders: (1) Leaders' preferred styles, (2) main attributes, (3) guiding intentions, (4) colleagues' perceptions and (5) sustainability implementation mechanisms and impacts. These were asked to help answer the research questions and highlight the impact of leaders' practices in meaningfully addressing the wider socio-ecological challenges imbued in organizational change and sustainability/SDGs' concerns within a Middle Eastern context. They were face-to-face interviews, conducted in English and lasting on average, 45 min. However, some took longer depending on their propensity to expand on leaders' perceptions, and the nature and impacts of how their localized and contextualized practices affected wider socio-ecological challenges in the region (up to 90 min). These interviews were recorded, with the prior permission of each of the participants, and transcribed using the NVivo 12/R1 Pro-Version Mac software package (see Appendices [S1](#) and [S2](#) for further details). The procedure elicited thick descriptions, as participants were able to clarify the complexities, the paradoxes, and the dynamism of the challenges. Such analytical insights helped us reach theoretical saturation (Braun and Clarke 2021) on the extent of the perceived localization of leaders' values and governance mechanisms (Saz-Carranza and Ospina 2011), and how they were contextualized within organizational socio-economic networks (Uster, Vashdi, and Beeri 2022). Doing so helped us to address the study's key research question on meaningful set of Network Leadership practices that have been locally and contextually lagging in dealing with wider socio-economic-ecological sustainability challenges faced by changing energy sector businesses in the Middle East. Despite some of these advantages, semi-structured interviews are limited by the a priori selection of research objectives and interviewees' biases towards certain leadership properties (Kallio 2024). The data collection lasted two months, followed by coding, meaningful thematic interpretations, and analysis of

TABLE 1 | Six-phase process of theme generation.

Phases	Description procedures
1. Familiarizing yourself with the data	Transcribe data (if necessary), reading and re-reading the data, noting down initial ideas
2. Generating initial codes	Code interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3. Searching for themes	Collate codes into potential themes, gathering all data relevant to each potential theme
4. Reviewing themes	Check if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic map of the analysis (Level 3)
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme
6. Producing the report	The final opportunity for analysis, selection of vivid, compelling extracts examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis

Source: Braun and Clarke (2006), p.35.

the constituent theme 1–4, contributing to our new, innovative, reconceptualized model on leadership practices.

3.3 | Data Analysis

The collected data were analyzed using NVivo 12/R1 Pro-Version Mac software. We used (Braun and Clarke 2006) thematic analysis (see Table 1 below and procedural explications for the latter) to help provide a logical flow of insights into the extent, complexity, scale, impacts, and meaningfulness of organizational leaders localized and contextualized practices when they implemented SDGs/sustainability issues. To be able to integrate levels of analysis on the emerging themes (Johns 2018), the interviews were complemented with four additional stages of coding, which were beneficial in capturing the complexities and impacts and the extent of their meaningfulness in developing a model that could help address the interorganizational and societal level challenges that are still prevalent in the Middle Eastern energy sector.

1. First order codes included (e.g., L95, P, P48, Q4), and were generated using the operational areas of each of the energy businesses (e.g., upstream, downstream, midstream, services, shipping, and transportation) to help surface the extent of the density of leaders localized and contextualized practices and how ties between energy sector companies and various leaders were influential in wider SDGs/sustainability achievement.
2. Second order codes (e.g., P28, Q01, Q2, Q35, Q5) were developed on the basis of segmenting the companies' various change initiatives, the reasoning underpinning leaders' implementation practices and various organizations' strategic compliance with wider SDGs/sustainability achievement (e.g., societal, economic, and environmental/ecological sustainability).
3. Third order codes (e.g., L, N35, M50) were generated by examining how the leadership practices embedded

localization, contextualization, cultural diversity, and inclusion, and how these helped to meaningfully develop a model of operational and strategic significance for energy sector organizational leaders addressing similar sustainability concerns.

4. Fourth order codes (e.g., N75, O19, P11) were developed based on the various localization and contextualization traits highlighting leaders' capacity to align their interorganizational efforts in tackling the socio-ecological difficulties arising from energy businesses' operations. A model was developed from the study's four key themes derived from the use of Braun and Clarke's analysis (see Table 1 below).

Themes and sub-themes were generated using an inductive reasoning process including leaders' perceptions, and the impacts of what they did to achieve sustainable businesses and address the wider ecological issues. The outcomes are highlighted in 4 themes. Level one theme was generated from the 26 leaders' perceptions of which leadership style/practices were operationally and strategically viable within their contexts in addressing wider SDG concerns. Level two theme was generated from discussions with leaders on how their perceptions impacted what they did. Level three theme highlighted what (if any) significance the study's results have (had) on the literature on leadership practices, change and SDGs/sustainability in a Middle Eastern context. The final fourth level theme highlighted the extent to which the overall, interorganizational leadership practices meaningfully impacted on interorganizational—socio-economic-ecological strategic alignment. A new model on how leaders can meaningfully address the lagging socio-ecological concerns was the result of this research procedure (see Table 2 and Figure 2).

4 | Results

The study's results (i.e., the four key themes) highlight the extent and scale of what leaders did at localized energy business and the

TABLE 2 | Participants' perception of Network Leadership Concept.

Interview	Network ties	Strategic views	Cultural diversity	Role distribution	Holistic approach	Knowledge based
Int 1	X			X		
Int 2		X				X
Int 3		X				
Int 4				X		X
Int 5				X		X
Int 6			X			
Int 7		X			X	
Int 8						
Int 9			X			X
Int 10	X			X		X
Int 11	X					
Int 12			X			
Int 13					X	
Int 14		X				X
Int 15				X	X	
Int 16		X	X			
Int 17						
Int 18				X		X
Int 19					X	X
Int 20	X					
Int 21	X					
Int 22	X					
Int 23			X			
Int 24		X		X		
Int 25						
Int 26				X		X

Middle Eastern contextualized levels. The four areas include: (1) Operational; (2) strategic; (3) cultural; (4) inter-firm knowledge alignment. These combined areas helped us in reconceptualizing which leadership qualities, attributes and actions are actually needed for energy sector organizations when they try to meaningfully address the socio-ecological sustainability lag within energy businesses and the overall impacts in the Middle East.

4.1 | Level One: Operational Practices

The first level theme helped to identify high density ties that were fundamental in the structural, operational, and people-relational aspects of implementing leadership practices within and beyond the diffusion of organizational networks. To ascertain the extent to which leaders' actions were meaningfully seeking to address SDG concerns, they highlighted not only how

operationally complex the business of grid maintenance was but also the criticality of maintaining a “*high-volume intersection between different team leaders*” in the coordination to sustainability implementation efforts (see *Int 15*). While the leaders were cognisant of the scale and impacts of the changes in the energy sector over the past two decades, they were also aware of the importance of maintaining “*solid ties and relations between different divisions and teams*” (see *Int 21*) for the operationalization of the SDGs.

4.2 | Level Two: Strategic Practices

At the second level, organizational leaders identified a set of local and contextual changes needed, and the need for strategic focus in implementing the SDGs. They perceived these as indicative of their firms' commitment to promoting wider social

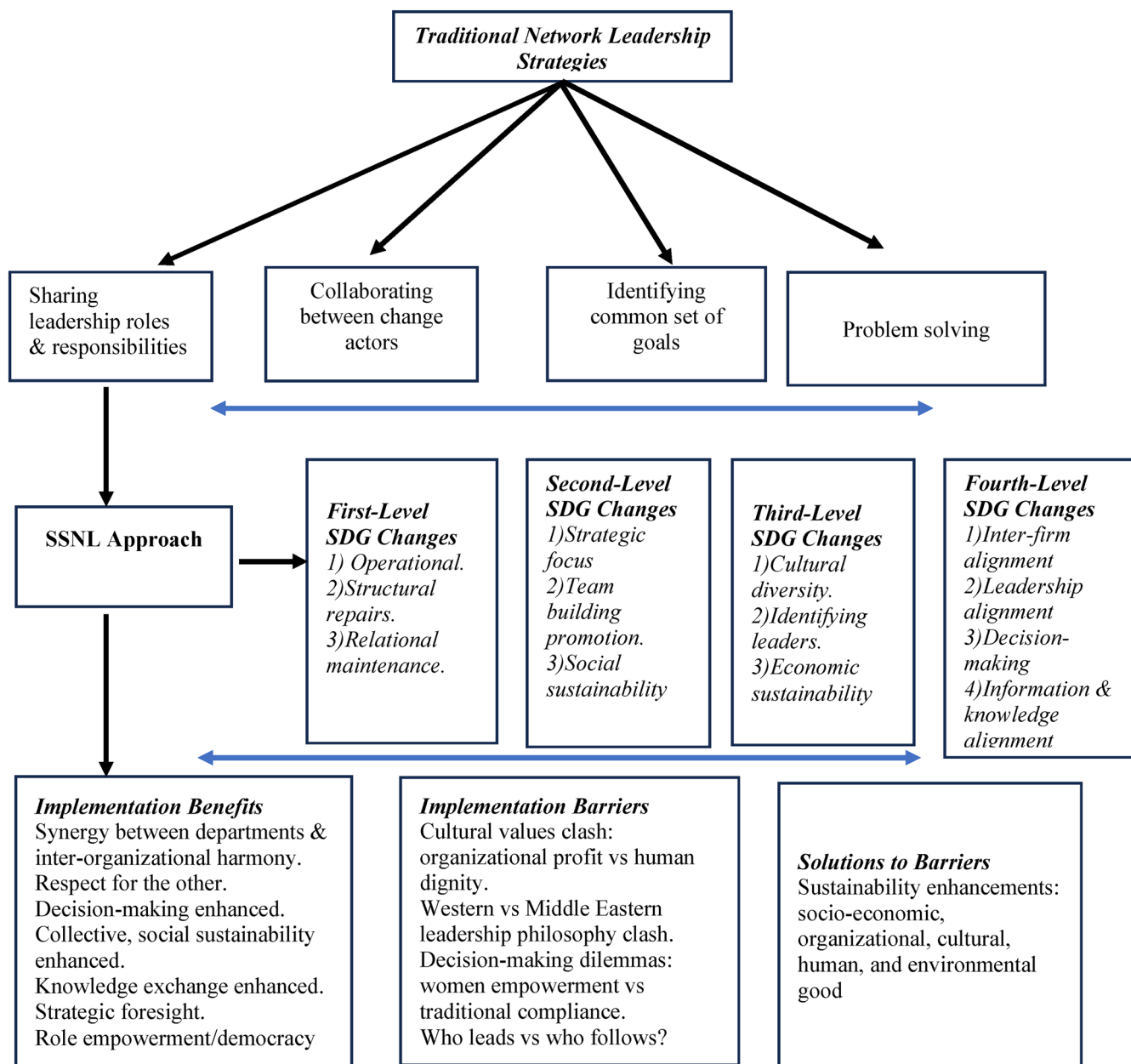


FIGURE 2 | Strategic, Sustainable Network Leadership (SSNL) Approach. Key: SSNL = Strategic, Sustainable Network Leadership. [Color figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com/doi/10.1002/sc.2029)]

sustainability issues and in successfully implementing the SDGs. Having noted some of the value enhancing and capability pressures from different stakeholders, the leaders also highlighted the importance of embedding sustainability in their actions and strategic plans (see *Int 26*). While highlighting the importance of participating and contributing to international energy sessions and discussions, the leaders also increasingly became aware of social sustainability responsibilities and the significance of their contextualized enactments (see *Int 17*).

4.3 | Level Three: Cultural Practices

The third level saw leadership practices increasingly being embedded with wider, cultural diversity and inclusion. While leaders highlighted the importance of effecting organizational

culture and change towards SDGs/sustainability achievement, they also noted some concerns ranging from pressures to curtail CO2 emissions to maintaining the “*economic sustainability and resilience*” of their companies (see *Int 11*). Additional pressures on leaders’ capabilities in SDG implementation also included the ethically, morality and legality to do so by law (see *Int 19*) within an increasingly diverse workforce (see *Int 7*).

4.4 | Level Four: Interorganizational Knowledge Exchange Practices

Level four witnessed an emphasis of leaders’ practices on greater interorganizational SDGs/sustainability goals’ alignment. Their perception shifted from the localization, contextualization, and preservation of the operational effectiveness of local economic,

entrepreneurial, and institutional ecosystems (Neumeyer and Santos 2018; O'Leary et al. 2016), to more strategic, sustainability concerns. While highlighting the importance of distribution of leadership responsibilities based on capacity, suitability, and the knowledge of actors (Barbagila et al. 2021), leaders stressed how individuals' collective contributions (as sustainability and change actors) are the meaningful drivers to address the wider concerns. They include passion, desire, capabilities, creativity, and knowledge for the greater good of society. They highlighted the significance of acting collaboratively (see *Int 15*) on sustainability projects on a national level (see *Int 13*).

Additional interviewee quotes particularly highlight leaders' decision-making capabilities to bring about interorganizational changes needed when addressing socio-economic-ecological gaps (Kallmuenzer et al. 2023; Phillips 2018). Greater emphasis was placed on interorganizational collaboration, information sharing and actors' knowledge exchange (see *Int 8* & *Int 25*).

The combination of these aspects was used to develop our new model: Strategic, Sustainable Network Leadership (see next two sections). While Table 3 illustrates a set of empirical and theoretical findings from this study's core notion of network leadership, it additionally highlights the paper's insights in reconceptualizing the leadership practices used within localization and contextualization discourse and contributes to developing additional knowledge on the topic.

5 | Discussion

Theme 1 of our study's results surfaced the important role of leaders' perceptions when wider socio-ecological challenges are

being tackled. Our results further showed the cruciality of which leadership styles could be operationally suitable if energy sector organizations are to attain the broader socio-economic-ecological sustainability concerns. While Millot, Krook-Riekkola, and Maïzi's (2020), López-Concepción et al.'s (2022) and Harris et al. (2023) conceptualization of leadership practices have been acclaimed in the literature for their sustainability values (Neumeyer and Santos 2018; Saz-Carranza and Ospina 2011), the current focus on the extent to which these are adopted at localized and/or contextualized settings (O'Leary et al. 2016; Hickel 2019) only serves to accentuate the theoretical dichotomization of both these critical concepts in the examination of the wider socio-economic, cultural, and ecological impacts of leaders' actions on firm, people, and ecological welfare. Our study's first finding bridges and thereby extends this dichotomization to highlight their complementarity. Furthermore, while Wijethilake et al. (2023) showed the benefits of team/people-orientated, managers/ senior executives' practices in a top multinational garment company in Sri Lanka, and Weber, Büttgen, and Bartsch (2022) reflected on leaders' implementation of digitalization practices, their focus on both the localized and contextualized nature of such practices failed to resolve the multi-dimensional, wider sustainability challenges beyond the organizations examined. Our study's results extend this theoretical and practical limitation, thereby addressing this gap (see themes 1–4).

Furthermore, while the existing scholarly works emphasize the benefits of technical, operational leadership practices in achieving sustainability, (e.g., Sales, Mansur, and Roth 2023; Weber, Büttgen, and Bartsch 2022; Santos et al. 2023), a pattern has emerged highlighting a financial know-how, budgetary and reporting mechanism focus. These have generated, additional (paradoxical) confusions on which one is the most sustainably viable (Wijethilake et al. 2023; Rogelj et al. 2021),

TABLE 3 | Conceptual Contribution to Network Leadership.

Concepts	(McGuire and Bevir 2011)	(Wei-Skillern and Silver 2013)	(Stiver 2017)	(Strasser, de Kraker, and Kemp 2022)	(Cristofoli et al. 2021)	Research contributions
Coordination	X			X		
Collaboration	X		X	X		
Facilitative/collective	X	X	X		X	
Power/influence	X	X	X		X	
Connectivity		X	X		X	
Relational/trust	X	X	X			
Structure	X	X		X	X	
Knowledge	X		X			
Network ties						X
Strategic view						X
Cultural diversity and inclusion						X
Distribution of responsibility						X
Holistic approach						X

particularly in dealing with a challenged energy ecosystem (Moore 1993; Uster, Vashdi, and Beeri 2022). To clarify this confusion and extend the existing localization and contextualization of organizational change leading to meaningful SDG implementation, this study introduces the important notion of leadership perceptions (Theme 1). This centers on individual change agents-as-preceptors of the constituent nature and impact of implementing such network leadership qualities as role distribution, sharing, and accountability in an energy context, and how to harness (and embed—Kallmuenzer et al. 2023) the lagging wider, strategic benefits beyond localized organizational settings. Therefore, our study serves to extend Wind, Klaster, and Wilderom's (2021) two-by-two theoretical model, which highlighted four main areas that inadvertently arise because of leadership practices being constrained by localization and contextualization aspects beyond their control: connecting, consulting, catalyzing, and coaching. While (Millot, Krook-Riekkola, and Maïzi 2020) and Davis et al. (2018) had earlier echoed similar constraints of leaders' contextualized responses to wider sectoral and societal challenges, our study's Stage 1 coding highlights the benefits of doing so at societal and ecological levels of consideration. Maurya et al. (2021) earlier attempted to harmonize literature on leadership, organizational change and SDGs, but their unattended focus on wider impacts has also led to our study's extension of the crucial non-technical (or strategic) and socio-cultural competences and attributes needed in sustaining organizational, human, and ecological well-being in more meaningful ways than the current theoretical depictions allow. Our study highlights how managers' wider, practical applications of organizational change towards sustainable goals can be successfully or unsuccessfully driven by passion, desire, capabilities, creativity, and knowledge (see coding stage 4). Dessaigne and Pardo, (2020) earlier realized this socio-cultural gap in the literature without theoretically and empirically filling it. We have done so.

Theme 2 may have highlighted leaders' discussions about their perceptions of the *social and organizational impact(s)* of their practices. While one could claim that this perspective adds to investigation of how high-income nations' degrowth (energy and other resource use reduction) has practical societal and economic impacts not only on Middle Eastern-based organizations but also their allied countries, there is something special in our work. Our study's results highlight how leaders' actions impacted a chain of firms that were seeking to address (and thereby change) the current theoretical lag in organizational leadership's capacity in locally, contextually and meaningfully addressing sustainability-challenged-firms in an era of constant change. See for example, (Millot, Krook-Riekkola, and Maïzi's (2020)) study on how Sweden and France's leaders' renewed energy policies failed to locally and contextually address carbon emissions, power production, heating systems' replacements and total industry electrification. Our study addresses this ongoing leadership capabilities deficiency. We do so by adding the socio-cultural sensibilities that leaders need to meaningfully deal with the recurrent wider change and sustainability issues. Wijethilake et al. (2023) earlier suggested that leaders need to adopt a range of people-orientated initiatives to successfully implement sustainability programs (e.g., via training, development, empowerment, team orientation, leadership). Additionally,

they included productivity and efficiency-orientated initiatives (e.g., open communication, professional recommendations), growth-orientated (e.g., continuous improvements, sustainability innovations, community engagement), productivity- and efficiency-oriented changes (e.g., use of professional recommendations, open communication), and stability and control-orientated qualities (e.g., life-cycle assessment, sustainability budgeting, investing, appraising). While such leadership qualities may provide some panacea to the theoretical/conceptual and practical implementation lags in the current literature and practice on SDG implementation, the extent of organizational sustainability, and leadership capabilities role in it, particularly during change has also fallen short of doing so. We have extended this shortfall by developing a case-informed integrated model geared towards making such a socio-economic-ecological change effective as earlier envisioned (Rogelj et al. 2021).

Theme 4 culminates in filling both a theoretical and practical gap in the current scholarship on the conceptualization of how various organizational leaders locally perceive and contextually implement SDG practices to resolve wider sustainability concerns. While existing scholarly works' contextualized and localized perception of leadership practices (e.g., Weber, Büttgen, and Bartsch (2022); Poddar and Narula (2018); Kallmuenzer et al. (2023); O'Leary et al. (2016)) ranging from an emphasis on leaders' digital capabilities to the institutionalization of regulatory frameworks has inadvertently led to the inadvertent and disparate (and sometimes confusing/paradoxical) examination of the localization and contextualization debates (Wijethilake et al. 2023; Santos et al. 2023; Sales, Mansur, and Roth 2023; Poddar and Narula 2018; Weber, Büttgen, and Bartsch 2022; Acciarini et al. 2022), attempts to resolve the theoretical and practical lag(s) have fallen short of its meaningful resolution (Roehrich et al. 2023). Our study's penultimate model shows what could be gained (at organizational, leadership, societal and ecological levels) when energy firms' leaders bring together different network and (inter) organizational change actors to resolve the gap(s) in knowledge exchange, communication, sustainability and value-enhancement strategies that were initially localized (Waseem et al. 2018). Our results show the impacts, scale and meaningfulness in addressing SDGs when the leaders acted collectively and utilized a range of technical and non-technical leadership capabilities to do so in the energy sector in the Middle East (see Table 3, Figure 2 and coding stage 3).

6 | Conclusion

6.1 | Contribution

While energy companies are required to undergo multiple organizational changes to address firm, human, industry, ecological and societal poly-crises, the scholarly and practitioner works' continuous focus on leaders' localized and contextualized (O'Leary et al. 2016), operational and technical practices (see 17 SDGs; Kallmuenzer et al. 2023; Phillips 2018), has led to a Business and Management failure to evince "how" (via which coordinated set of networked leadership competences) the wider sustainability issues can be meaningfully addressed. The disparate attempts to operationalize technically orientated financial, and personal leadership acumen (Moccia, Zhao, and

Flanagan 2020; Asimakopoulos and Whalley 2017) have partially clarified the confusion as to whether organizations should pursue a growth or degrowth agenda and what leadership practices are needed to avert cataclysmic implementation failures by 2030 (Wijethilake et al. 2023; Hickel and Kallis 2020). Our study has generated a novel set of leadership practices that would theoretically contribute to filling the wider socio-economic-ecological sustainability gap and highlighting which practical conglomerate of leadership attributes are meaningfully required to do so (see Figure 2 below).

6.1.1 | Theoretical

Theoretically, this study contributes four thematic leadership practices namely (1) operational; (2) strategic; (3) cultural and (4) interorganizational knowledge exchange alignment. They show the extent to which leaders' perceived localization and contextualization of their practices can be extended beyond the 8 energy sector firms to reshape the interorganizational network relationships and contribute to wider socio-economic-ecological welfare. This study contributes to the current inadequacy in reframing and reconceptualizing the literature on network leadership, organizational change, and SDGs/sustainability and filling the localization versus contextualization and growth versus well-being dichotomization by introducing a coordinated set of leadership practices. Our model bridges the polarization discord (Hickel and Kallis 2020; Hickel 2019). Our new Sustainable Network Leadership model also reflects on the wider sustainability benefits beyond the growth/degrowth debates (Wijethilake et al. 2023; Hickel and Kallis 2020) and to factor in people's socio-cultural practices and attributes when conceptualizing the perceived benefits of the wider applications of localization and contextualization practices leading towards more sustainable development for organizations, people, society, and the global ecological system. Both technical and non-technical leadership practices are needed in such recalibration.

6.1.2 | Practical

Practically, this research contributes to the dearth in the body of knowledge on "how" localized and contextualized leadership practices (Kallmuenzer et al. 2023; Uster, Vashdi, and Beeri 2022) can be meaningfully conceptualized to understand how organizations' leaders' help drive organizations', humans, and ecological sustainability. While extant research such as those of Acciarini et al. (2022) have used digitalization to develop a model on how organizations can capture, create, operationalize and sustain value, the social impact of their framework is limited to a survey from 60 respondents from a single European automotive company. Additionally, while Santos et al. (2023), Sales, Mansur, and Roth (2023) and Weber, Büttgen, and Bartsch (2022) re-echoing how beneficial digital capabilities can be towards sustainable organizational transformation (Al-Ghanem, Braganza, and Aldhean 2020), the wider, practical applications of leadership practices towards sustainable ends are still lacking (Neumeyer and Santos 2018; López-Concepción et al. 2021; Moccia, Zhao, and Flanagan 2020), despite a steady increase of research on localization contextualization, organizational growth and human

TABLE 4 | Network Leadership Strategies: Theoretical, Empirical Findings and Novelty.

Findings	Literature	Novelty
Organizational relational maintenance		X
Team and wider social harmonization		X
Interorganizational information and knowledge harnessing		X
Respect and cultural diversity		X
Economic good		X
Organizational and national strategic alignment		X
Sociable leaders	X	
Innovative leaders	X	
Personally approachable leaders	X	
Influential leaders	X	

well-being (Rogelj et al. 2021; Wijethilake et al. 2023). This study fills this practical gap and highlights the novelty of leaders' contributions in doing so (see Table 4 below for details).

6.2 | Recommendations and Implications

The literature on leadership practices and organizational change leading to sustainability issues highlight the importance of using technical operational, localized and contextualized knowledge to foster leadership values and regional autonomy (Uster, Vashdi, and Beeri 2022). While these leadership qualities are anticipated to drive change (Weber, Büttgen, and Bartsch 2022; Poddar and Narula 2018), the plethora of scholarly works focusing on technically orientated, networked mechanisms to do so (Díaz-Gibson et al. 2017; Harris et al. 2023) have only succeeded in extending our scholarly and practical knowledge on the technical competences required to achieve this (e.g., budgetary reporting, financial and regulatory compliance—Hickel 2019). However, such attempts have failed to extend the localization and contextualization debates further as a (re)-orientation of the interorganizational networks and leadership practices needed in driving the collective socio-cultural value sets towards energy businesses and society's sustainable ends are left un-addressed. Further, while the paucity of research examining how leaders' earlier focus on technicalities of change has failed to adequately resolve the organizational growth and human well-being and ecological/environmental ecosystem concerns caused particularly by energy sector organizations (Hickel and Kallis 2020; Wijethilake et al. 2023; Rogelj et al. 2021), this study's findings imply the necessity to do so. This study contributes by recommending four key thematic leadership practices and a sustainability model that reconceptualizes and repositions the current growth and degrowth agenda within the more expansive sustainability areas of human well-being and ecological

ecosystem. Such a debate has been extended to include a developing economy context. This reconceptualization and recalibration of the current localization and contextualization of leadership practices within organizational change and sustainability will facilitate a re-examination of the set of network leadership practices required for successful implementation of change, and wider SDGs/sustainability concerns in the energy sector, as had earlier hoped for. To this end, it is highly recommended that a more coordinated deployment of a set of technical and non-technical leadership practices, localized and non-localized, contextualized and non-contextualized, organizational growth, human and ecological well-being competences will provide a more nuanced and dynamic examination of the existing polarization/dichotomization of the organizational versus human well-being considerations in sustainability circles. Additionally, by considering the organizational growth versus human and ecological well-being discourse (Hickel and Kallis 2020), our study extends such considerations to include the Middle Eastern energy sector.

Such a proposition would entail a more strategic and socio-cultural investigation into the socio-economic as well as broader cultural examinations of what types of knowledge exchange alignment practices are required by organizational towards sustainable ends and how these are strategically practiced in different interorganizational network settings (see this study's 8 mini energy company cases). It is therefore recommended that leaders demonstrate “how” and “why” their localized and contextualized practices meaningfully help in the reshaping of interorganizational network collaborations and norms that contribute to wider sustainability concerns. This will help in developing and maintaining a vibrant, dynamic, and agile socio-economic-ecological welfare ecosystem, which will be more adaptable to addressing the increasingly poly-centric nature of organizational, human, ecological and societal sustainability. The additional implication of such a development is to enhance the operational and strategic viability of an interorganizational network and enhance the potency of the localization and contextualization of leadership practices towards people-organizational-environmental infrastructures and systems that are more supportive and effective for sustainability.

The implications of this for strategic, organizational change are two-fold. Firstly, it raises awareness and knowledge of “what” aspects of employee and managerial-level operations’ practices (reporting, technical, production and financial—Kallmuenzer et al. 2023; Poddar and Narula 2018) could be combined with the more strategic aspects for the meaningfulness and viability of sustainability-orientated-change (organizational, personal, societal, economic and ecological). Secondly, while existing scholarship on leadership highlights sociability and innovativeness as desirable leadership qualities in such contexts (Moccia, Zhao, and Flanagan 2020; Asimakopoulos and Whalley 2017), such theorization falls short of recognizing the inter-linkages between additional qualities such as leaders-as-change-drivers and leaders-as-socio-cultural-economic-and-ecological drivers if the lagging combination of human-organizational-ecological ecosystem of sustainability/social good is to be addressed in energy firms in the Middle East. What is being proposed here

is greater technical, social, and strategic capability synergizing between current technical leadership qualities and interorganizational leadership practices, interorganizational relations and inter-societal collaboration. Such a theoretical and practical synergy is anticipated to facilitate the development of new organizational, regional, national, and international competences for strategic change and competitive advantage for businesses and people in more meaningful ways than is currently the case.

6.3 | Limitations and Directions of Future Research

This study spotted a gap in the current literature (see section 1) and by focusing on leaders’ role in facilitating SDGs’ implementation in the energy sector of the Middle East to address the inadequate attention to how localized and contextualized leadership practices can help to meaningfully address wider socio-economic-ecologic sustainability and organizational change concerns, we created an unintended limitation. Our contribution of four novel leadership practices ranging from the technical, operational to the non-technical, and strategic aspects and the innovative Strategic, Sustainable Network Leadership model articulating “how” to do so, and “why” this is important could benefit from further examination in different contexts, cultures, ecological and political environments. Secondly, this study collected data from only energy sector business leaders to ascertain the localized and contextualized impacts of their leadership practices on sustainability while overlooking whether our model’s four sets of qualities can have a more strategic and meaningful influence on increasingly relationally networked entities in a continuously evolving/agile socio-economic, environmental, and cultural ecosystem over time and business spaces. Therefore, future research can combine a range of qualitative, quantitative, longitudinal, and analytical methods to address the impacts of leaders’ actions and qualities on individuals, collectives and organizations’ socio-technical and cultural resilience.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.