

**King's College London**  
**School of Social Science and Public Policy**  
*Coversheet for submission of coursework*  
*(Undergraduate & Taught Postgraduate)*

Complete all sections of this form and ensure it is the first page of the document you submit.

Failure to attach the coversheet as required may result in your work not being accepted for assessment.

**Word count, which should be calculated electronically, must be stated accurately below.**

For details of what is included in the word count, and penalties incurred by exceeding the word count limit, please consult the [coursework submission policy in the departmental handbook](#).

**DECLARATION BY STUDENT**

This assignment is entirely my own work. Quotations from secondary literature are indicated by the use of inverted commas around ALL such quotations AND by reference in the text or notes to the author concerned. ALL primary and secondary literature used in this piece of work is indicated in the bibliography placed at the end, and dependence upon ANY source used is indicated at the appropriate point in the text. I confirm that no sources have been used other than those stated.

**I understand what is meant by plagiarism and have signed at enrolment the declaration concerning the avoidance of plagiarism.**

**I understand that plagiarism is a serious examinations offence that may result in disciplinary action being taken.**

**I understand that I must submit work BEFORE the deadline, and that failure to do so will result in capped marks.**

Candidate no.	A	E	0	7	8	2	0
---------------	---	---	---	---	---	---	---

(This is a letter followed by five digits, and can be found on [Student Records](#))

Module Title:	Politics of energy security in Eurasia
Module Code: (e.g. 5AFOB000)	7YYRN005
Assignment: (may be abbreviated)	2500-word academic essay
Assignment tutor/group:	na
Deadline:	26/04/2024
Date Submitted:	25/04/2024
Word Count:	2625

Your assignment may be used as an example of good practice for other students to refer to in future. If selected, your assignment will be presented anonymously and may include feedback comments or the specific grade awarded. Participation is optional and will not affect your grade.

Do you consent to your assignment being used in this way? Please tick the appropriate box below.

YES ☒ NO ☐

*6. Many European countries have strived to reduce their dependence on Russian gas. This process preceded Russia's invasion of Ukraine, and it appears to have accelerated for some countries since 2022. Pick a country in Europe, analyse its efforts to reduce dependence on Russian gas since 2022, and explain its success/failure?*

## **Weathering the crisis: Italy's quest for energy security after Russian war and consequences of its strategy**

### **Introduction**

Gas is the predominant energy source utilised in Italy and, before the outburst of the conflict in Ukraine, a large part of it came from Russia. These two features came about in an energy landscape that saw the liberalisation of the gas and electricity sectors in the 90s, an EU-triggered shift towards privatisation, unbundling and shorter-term contracts. Energy security was claimed to be ensured through alternative supply routes and lower energy prices, and thus a more efficient integrated market. But, crucially, the war in Ukraine and Russia's subsequent weaponisation of energy highlighted two key shortcomings of the EU liberal market model: European countries have grown heavily dependent on Russian gas, and this economic interdependence with Russia has not been enough to guarantee peace (Skalamera, 2023).

This harsh realisation prompted European countries to suddenly focus on securitise their gas supplies, in a novel geopolitical environment which called upon governments, not markets or a politically constrained EU, to intervene. The Italian situation is indicative: the Draghi government, in concert with Italian champion ENI, rapidly engaged in diplomatic talks with African countries to find alternative supplies and mandated the construction of new LNG infrastructure, while providing conspicuous subsidies to shield the population from soaring gas prices.

Meanwhile, these emergency measures and longer-term responses like the "Piano Mattei" have sparked debates around the opportunity for Italy to become the new "hub" for gas within a potentially dominant South-North energy axis. It is debated how such an opportunity could, however, entail new geopolitical risks while contradicting efforts to decarbonise. Ultimately, the success or failure of the Italian quest for energy security must be assessed keeping in mind climate commitments, which could be difficult to reconcile with new import and infrastructural dependencies (Maliszewska-Nienartowicz, 2023).

This paper thus aims to investigate how Italy has reduced reliance on the enormous amounts of Russian gas it used to import and to what extent its strategy has been and could be successful in the future, keeping in mind short-term needs to secure supplies and longer-term decarbonisation objectives. For this purpose, the paper is divided in three sections: first, an overview of the Italian

energy balance, with specific focus on gas; second, an analysis of the efforts to diversify gas supplies; and thirdly a focus on the measures taken to reduce gas consumption in the sectors in which it is most used, namely electricity generation and heating.

## Gas in the energy balance

Natural gas makes up of 40% of the Italian energy mix, as illustrated in Figure 1, and accounts for 50% of the energy used for electricity generation – a unique feature compared to other countries in Europe (IEA, 2023a). As nuclear was abandoned with the 1987 referendum right after the Chernobyl accident, Italy privileged gas over Middle Eastern oil, at the time considered more volatile and coming from less politically stable areas (Bigerna et al., 2023). The positive perception of Russia as a reliable trade partner, even after the 2014 invasion of Crimea, became over time inextricably linked with the growing role of natural gas in the Italian energy mix (Prontera&Lizzi, 2023). Figure 1 also depicts the improvement in Italian energy efficiency over the last 15 years, reflecting a shift in the economic structure from the industrial to the service sector combined with advancements in energy efficiency (IEA, 2023a).

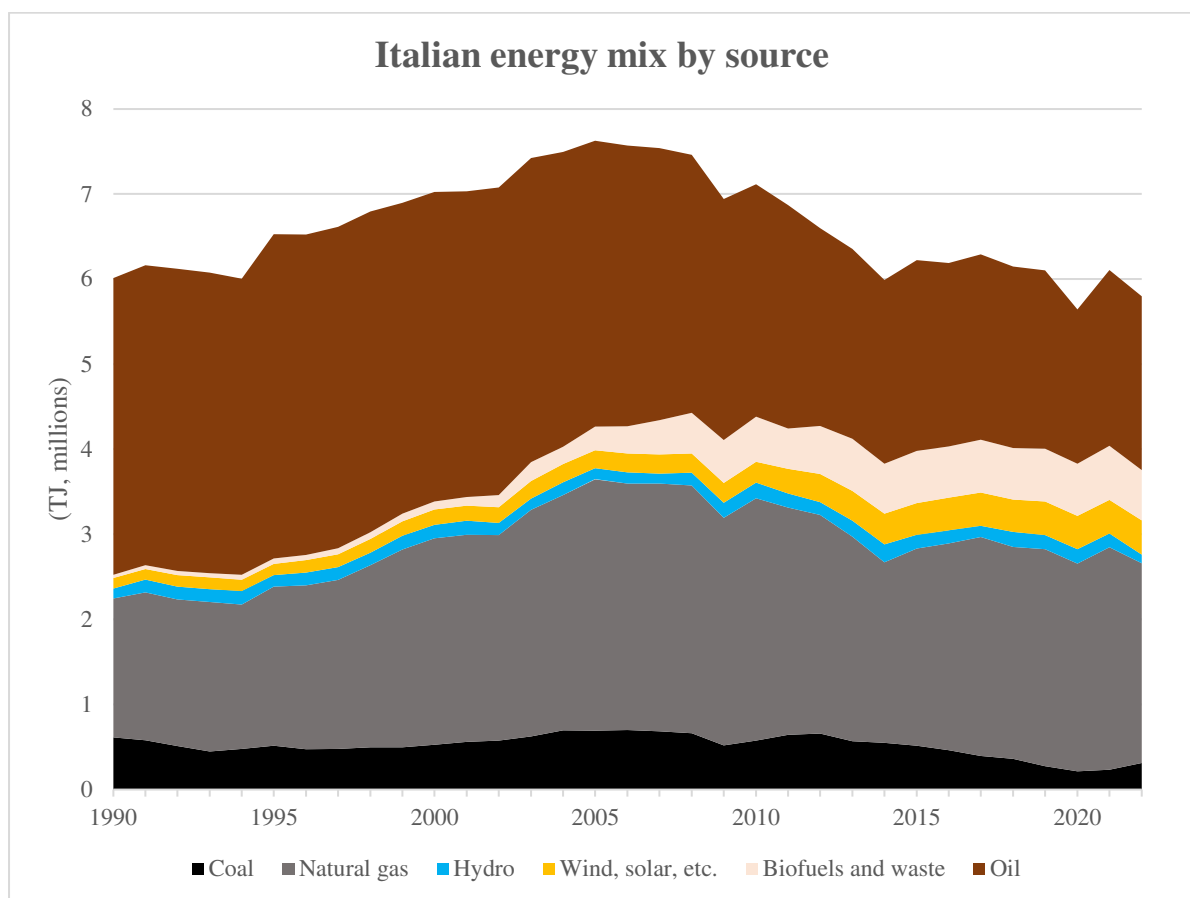


Figure 1: own rielaboration from IEA (2023a)

Italy's energy dependence – net imports in percentage of gross energy availability – totalled 75% in 2021 (Bigerna et al., 2023), not least because of an 80% decrease in domestic gas production in the previous 20 years (IEA, 2023a). The Italian gas import infrastructure comprises 5 pipelines and 3 LNG terminals, as shown in Figure 2. Russian gas comes from the TAG pipeline, and in 2021 amounted to 29 bcm (Prontera, 2024). The largest pipeline in the Mediterranean, Transmed, imports gas from Algeria, while Greenstream imports gas from Libya. TAP is the last segment of the Southern gas corridor, linking Azerbaijan with several southern European countries. Eastmed, a pipeline supposed to bring gas from the Eastern Mediterranean, has remained so far on paper due to cheap gas prices globally since the shale revolution and North African instability resulting from the 2011 Arab uprisings, factors that have stifled the economic rationale of the project (Varvelli, 2023).

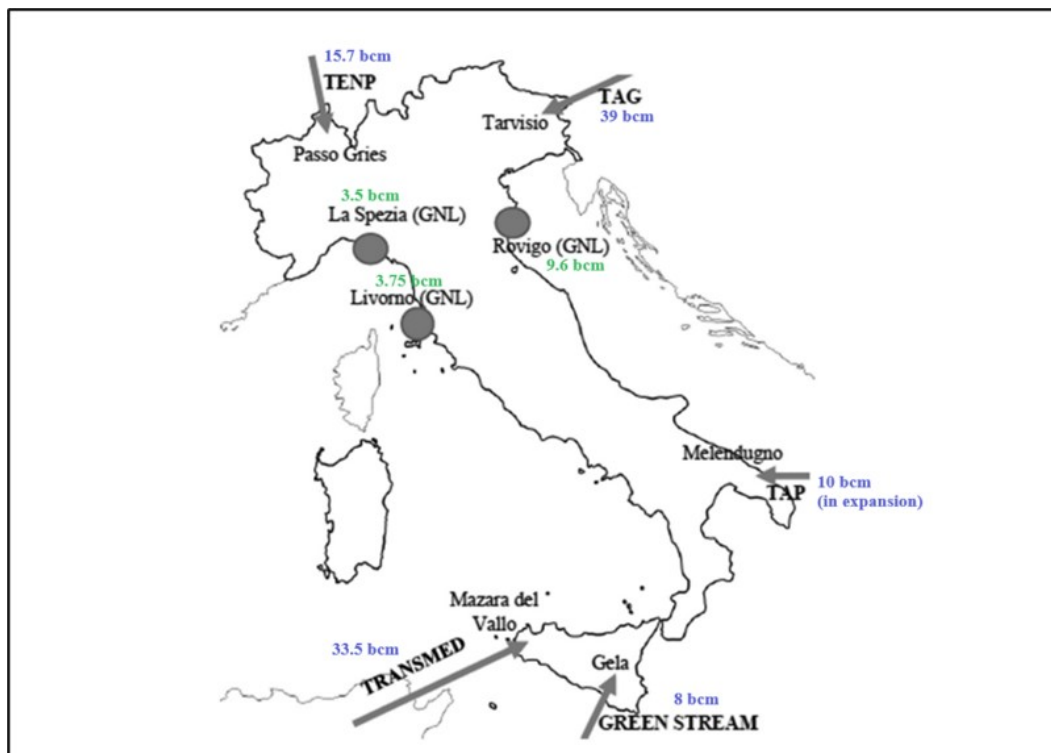


Figure 2: Italian gas import infrastructures and installed capacities, modelled from Prontera&Lizzi (2023)

## Rush for new gas

As Russia rapidly cut supplies, Italy found itself unable to wait for an EU-wide response. Beside what resulted in a 62 billion aid-package for families and businesses to lower gas prices, skyrocketing under the effect of speculation in the Amsterdam TTF market, the cornerstone of the government's strategy has been negotiating new gas volumes with both existing and new producers (ECCO, 2023). Essential was the collaboration with ENI, which flanked the foreign minister in every diplomatic meeting with energy suppliers. It is worth highlighting Italy's path-dependent

policy-making approach: in necessity of finding solutions from available means, the government turned to its national champions that had survived the privatisation era, similarly to postwar years (Prontera, 2024). Table 1 outlines the extra supplies the government aimed to obtain three years from the crisis to progressively recover almost 29 bcm of Russian gas. What transpires is a clear shift towards Africa and global LNG markets, and a renowned emphasis on national production.

<i>Origin</i>		<i>Expected volumes (bcm)</i>		
		2023	2024	2025
<b>Gas</b>	Algeria, Azerbaijan, national production	8.9	11.9	11.9
<b>LNG</b>	Egypt, Qatar, Congo, Angola, Nigeria, Indonesia, Mozambique, Lybia	7.9	9.5	12.7
<b>Total</b>		16.8	21.4	24.6

Table 1: Draghi government's plan, readapted from Prontera (2024)

One crucial consequence for Italy's energy security is new geopolitical dependencies. Algeria is a case in point: in relative terms, it has already attained the level of importance Russia had as a supplier, but has a sprawling population which will increase its domestic gas demand in the future (Bigerna et al., 2023). Further, because of production capacity constraints, Figure 3 shows how thus far Algerian imports have not met the agreed-upon terms. Conflicts in Libya and the current economic crisis in Egypt have hindered their export capacities and have resulted in volatile flows, to cite others. Scholar Al-Saidi warns how these countries might not be "white knights" willing to compensate European shortfalls upon request (Al-Saidi, 2023).

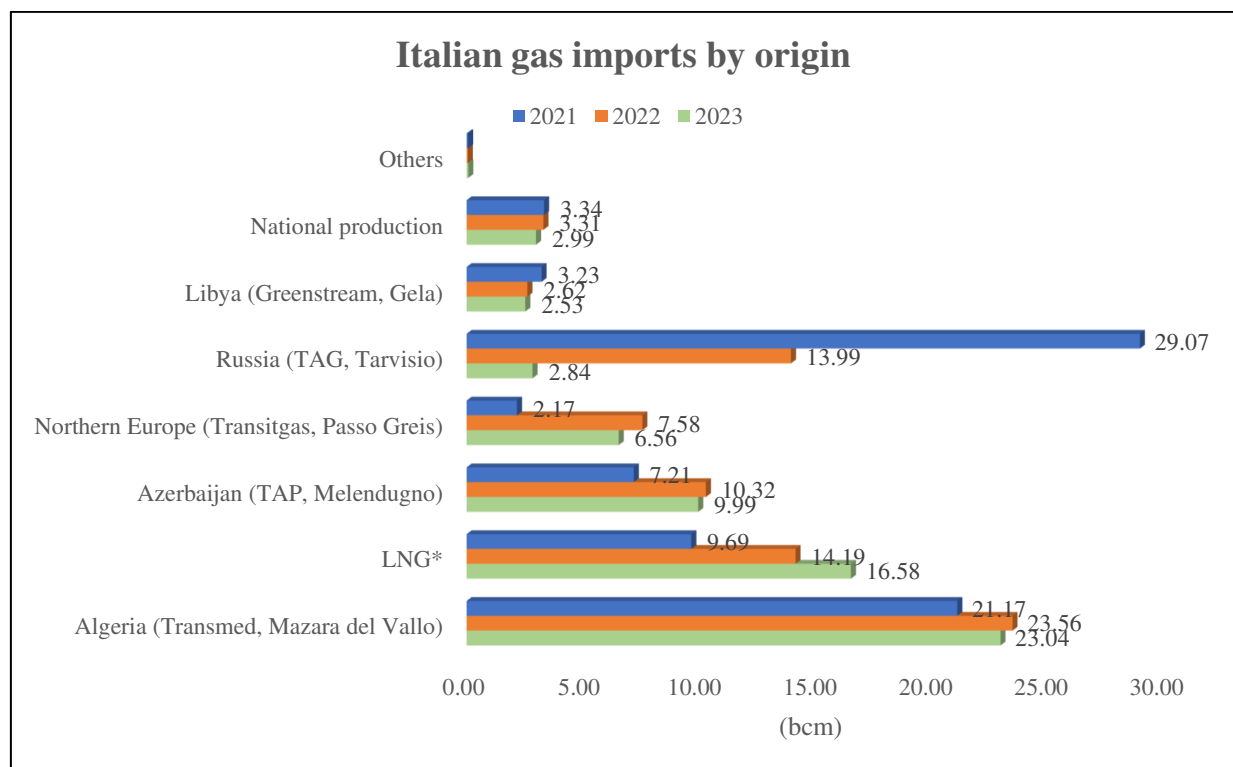


Figure 3, own elaboration from Statista (2024)

Moreover, another concern relates to countries in the MENA region struggling to maintain export capacities in the long-term (Ouki, 2023). The new Meloni government, as soon as it stepped in in late 2022, launched the “Mattei’s Plan”, a new model of cooperation with North African gas suppliers that address energy security needs while supporting energy development in partner countries (Sarno&Rizzi, 2022). The success of the plan, which aims to make Italy as a new “hub for gas”, depends on the improvements in the domestic energy sectors of those countries, for which Italian partnerships could be of great help. Nevertheless, the true tipping points will be the ability to pursue renewables, crucial to satisfy the future domestic demand, and the general outlook for gas demand in the next decade, upon which all gas explorations and renovation projects depend (Ouki, 2023).

Furthermore, the Draghi government commissioned the construction of two new FSRUs (Floating Storage and Regasification Units) and lifted environmental constraints for two already planned onshore LNG terminals, as shown in Table 2 (Zabrytska, 2023). These investments risk becoming stranded assets in a future in which gas demand is expected to decline significantly (IEA, 2023b) and with the uncertainty surrounding the potential repurposing of terminals and existing pipelines for hydrogen use (Sassi, 2023)(ECCO, 2023). One estimate suggests that planned regasificator capacity in Europe could reach 400 bcm, whereas LNG demand is projected to stay below 190 bcm (Nascia et al., 2022). These lock-ins are not only infrastructural but could also be contractual if the LNG long-term contracts do not have flexible destination clauses (McWilliams et al., 2023). They may become institutionalized as well if vested interests from established fossil fuel companies “capture” lenient politicians (Brauers et al., 2021). Indeed, the current populist right-wing Meloni government and its “pragmatic” approach to the ecological transition, with gas being hailed as transition fuel, may be well aligned to these firms’ interests.

<i>Capacity (bcm)</i>	<i>New LNG infrastructure</i>
5	<b>FSRU</b> in Piombino (“Golar Tundra”)
5	<b>FSRU</b> in Ravenna (“BW Singapore”)
12	<b>Onshore Terminal</b> in Gioia Tauro
8	<b>Onshore Terminal</b> in Porto Empedocle
<i>Total additional capacity: 20</i>	

Table 2: new LNG import terminals, readapted from Prontera (2024)

Overall, the events following the 2022 crisis have warranted a return of the State in the energy realm from its previous arm’s-length regulatory role. More than being controlled by interest group politics or by a transnational hegemonic group of fossil fuel companies, the Italian government

reacted defensively as a geopolitical actor to tackle the country's vulnerability from gas dependence. Building strategic reserves, diversifying the supply routes and securitise flows by seeking to influence producers are all features of an energy mercantilist strategy (Lind&Press, 2018) of a geopolitical State which leads and collaborate with the main economic actors – ENI and Snam in our case. This model of partner State risks inflaming intra-European competition and harming prospects of the EU energy integration, as noticed in many instances during the crisis – examples range from the 200bn uncoordinated aid fund offered by Germany to the competition for securing FSRUs (Prontera, 2024).

On its part, the EU was not able to unite and “speak with one voice”, apart from an agreement on compulsory joint purchases of 15% of Member States' mandatory storage filling targets, a fairly small amount (Barnes, 2023). The “dash for gas” could also undermine the EU position as a climate leader in international negotiations. Aggressively bidding for LNG rerouted sources otherwise directed to developing countries like Bangladesh or Pakistan, which ended up suffering from significant shortages (McWilliams et al., 2023).

### **Renewables and demand reduction**

The two other strategies aimed at reducing gas dependency in Italian energy policies have centred on a ramp up in renewable deployment and on reducing gas consumption in the short term, in line with the 2021 National Energy and Climate Plan (NECP). RePowerEU, the flagship EU response to the energy crisis, set more even more ambitious targets for the whole EU.

Figure 4 below illustrates the fuel-switching occurred from 2021 to 2022 in electricity production, and it shows how gas has not been reduced as a percentage of the electricity mix in the immediate period after the crisis. Rather, a gas-to-coal switching has largely made up for a decreased role of hydroelectricity in 2022, the latter due to adverse weather events (Desideri et al., 2023). Such development stands in contrast with the coal phase-out by 2025 agreed upon in the NECP (Prontera&Lizzi, 2023).

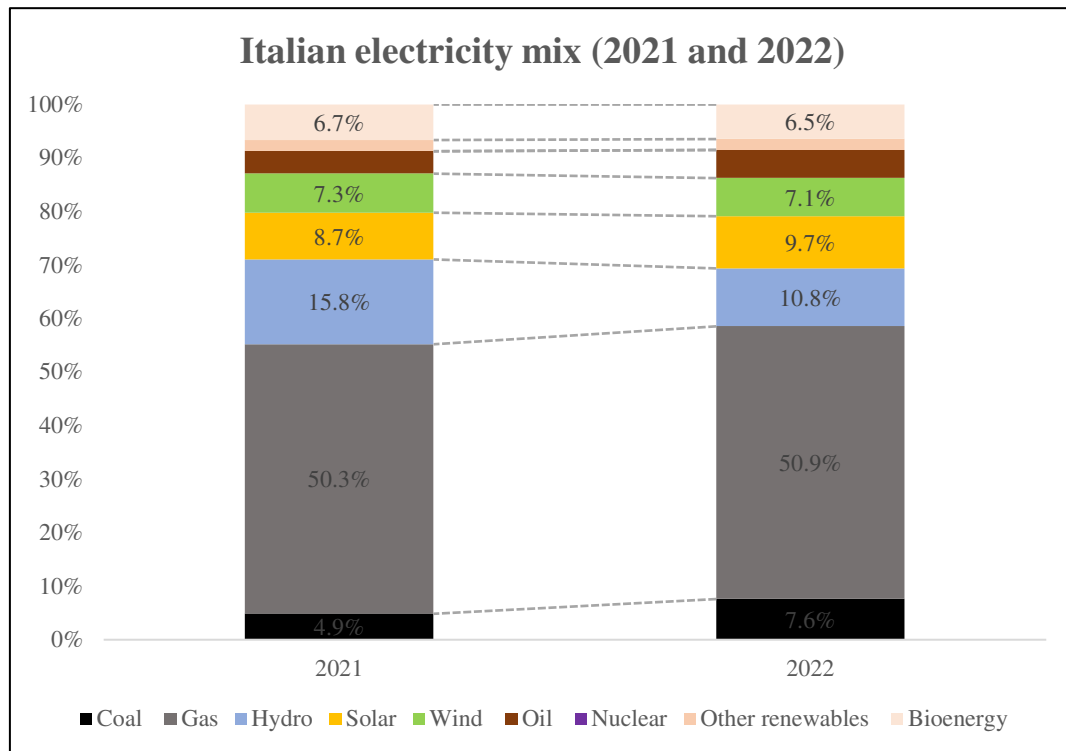


Figure 4: own rielaboration from OurWorldInData (2024)

To secure sustainable electricity production, crucial to decarbonise the energy sector and consequently the whole economy, the Italian strategy matches the RePowerEU objective of 70% electricity produced by renewables by 2030. This task seems daunting for Italy since renewables have hovered around a 40% share, as can be noted in Figure 4. Renewable deployment has been hampered principally because of long authorization procedures and local resistance (Prontera&Lizzi, 2023). The measures adopted by governments before the crisis contributed to create a complex patchwork of legislations accumulated over time, which are often difficult to decipher for regional and local administrations (Di Nucci&Prontera, 2021), whereas the governments' turnover after the crisis has heightened risks of regulatory instability (Frilingou et al., 2023). Nonetheless, despite support schemes for renewables being only half of current fossil subsidies (ECCO, 2023), the problem is not lack of investments: grid connection requests have increased by 8 times in 2022 from 2018, and are now waiting for approval (Terna, 2023). Overall, the attention of the Meloni government to gas imports from the Mediterranean and the renewed activism of ENI and Snam have reduced pressure for a full revision of the confused framework, something many authors have labelled as a missed opportunity for a faster decarbonisation (ECCO, 2023)(Frilingou et al., 2023).

Instead, reducing gas consumption has been an effective pathway to tackle rising prices, lower emissions, and deal with lower supply from Russia (Sarno&Rizzi, 2023). Affordability,



sustainability and reliability are indeed what constitutes the broadly defined concept of energy security (Winzer, 2011). The Draghi government drafted in 2022 a Plan aimed at reducing gas use by 15% by March 2023, mainly through fuel-switching in electricity generation and behavioural changes in domestic heating. Figure 5 shows how Italy has been successful in this regard, fostering cuts in the buildings and industry heating sectors in 2022 and slashing gas used for electricity in 2023.

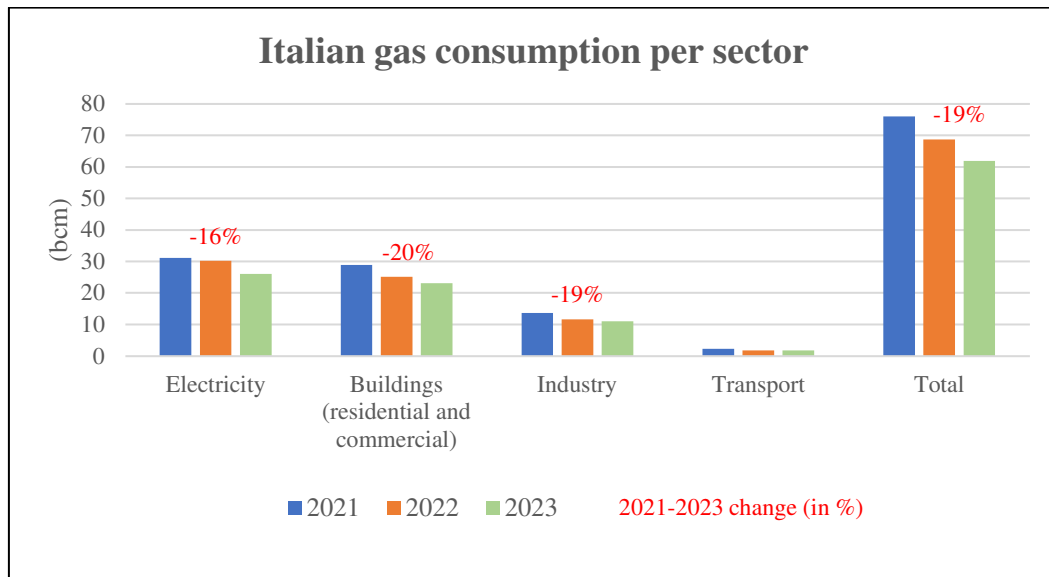


Figure 5: own rielaboration from Snam(2023) and Snam(2024)

However, these reductions seemed to have been driven by price signals and a mildly warm winter (ECCO, 2023), putting a question mark on medium and longer-term developments. The “Superbonus” tax credit for building renovations is currently being phased out, and no other structural plan is in place for revamping 70% of Italian homes heated with gas boilers (CLEW, 2024). Additionally, the considerable tax cuts and credits employed to mitigate the impact of astronomical energy prices are by nature an incentive to maintain fossil fuel dependence, especially if not targeted to the poorest (Frilingou et al., 2023).

Importantly, if permitting processes for renewables are speeded up by recently drafted measures to cut red tape, natural gas dependence could be substantially shrunk. Nevertheless, the Meloni government has not made concerted efforts to steer its national champions towards adopting low-carbon technologies, as it did when securing new gas contracts (Prontera, 2024). Authors has registered a lack of an overarching industrial policy aimed at public intervention in the energy sector and capable of decisively push for the green transition, with recommendations and funds mostly coming from the EU (Nascia et al., 2022)(ECCO, 2023). In this regard, talks of a European green industrial policy – for instance the NextGenerationEU or the NetZero Industry Plan – or lack

thereof in the future will profoundly influence and play a critical role in decarbonisation efforts. This is particularly significant in a context in which the EU is also becoming a more geopolitical actor (Siddi&Prandin, 2023).

## **Conclusions**

In conclusion, Italy was successful in weathering the immediate crisis triggered by the cut in Russian gas supplies, which previously accounted for about 40% of the gas imported. The government, in a situation of emergency, was able to secure new contracts with African countries (plus Qatar and Azerbaijan) in a rush for new pipeline and LNG gas, cooperating with ENI. At the same time, it requested a huge effort from the population to reduce gas consumption, especially during the 2022-23 winter season.

To assess the true success of the measures taken, though, one must look at their consequences. As explained in the paper, the pivot to Africa risks creating new geopolitical dependencies. Moreover, the goal of becoming an energetic corridor in a reanimated South-North axis faces the likely prospects of low demand from European countries, which have already secure new transits from the US in a friend-shoring fashion, and high demand from African countries, which are expected to rapidly grow in population. Expanding the gas infrastructure represents a long-term investment that contradicts the need for rapid decarbonisation of energy systems, potentially binding the country in carbon lock-ins. The new paradigm of States acting individually as geopolitical actors responding to energy security threats also risks harming an energy market which was starting to become integrated at the European level.

Renewable energy and decarbonisation have become even more important with the energy crisis. Yet reconciling climate commitments with energy security has proved to be difficult in practice, especially for the new right-wing Meloni government. Regulatory changes have only mildly accelerated the ramp up of renewables waiting in line for permits, and the lack of a green industrial policy risks prolonging Italy's dependence on natural gas, still widely used in industry and residential heating. Promising signals are coming from the EU, but, to conclude, more would be needed from an ideologically recalcitrant government to provide the decisive push for the transition.

## Bibliography

- Al-Saidi, M. (2023). White knight or partner of choice? the ukraine war and the role of the middle east in the energy security of europe. *Energy Strategy Reviews*, 49, 101116. <https://10.1016/j.esr.2023.101116>
- Andreolli, F., Bellisai, F., Bienati, M., Giordano, G., Governatori, M., Panzeri, D. (2023) IL PANORAMA ENERGETICO ITALIANO DOPO L'INVASIONE RUSSA DELL'UCRAINA. *ECCO in partnership with Friedrich Ebert Stiftung*, [www.eccoclimate.org](http://www.eccoclimate.org)
- Bigerna, S., Ceccacci, F., Micheli, S., & Polinori, P. (2023). Between saying and doing for ensuring energy resources supply: The case of italy in time of crisis. *Resources Policy*, 85, 103782. <https://10.1016/j.resourpol.2023.103782>
- Desideri, U., Krayem, A., Thorin, E. (2023). The Unprecedented Natural Gas Crisis in Europe: Investigating the Causes and Consequences with a Focus on Italy. *Energies* 16, no. 16: 5954. <https://doi.org/10.3390/en16165954>
- Di Nucci, M.R., Prontera, A. (2023). The Italian energy transition in a multilevel system: between reinforcing dynamics and institutional constraints. *Z Politikwiss* 33, 181–204. <https://doi.org/10.1007/s41358-021-00306-y>
- Frilingou, N., Xexakis, G., Koasidis, K., Nikas, A., Campagnolo, L., Delpiazzo, E., Chiodi, A., Gargiulo, M., McWilliams, B., Koutsellis, T., & Doukas, H. (2023). Navigating through an energy crisis: Challenges and progress towards electricity decarbonisation, reliability, and affordability in italy. *Energy Research & Social Science*, 96, 102934. <https://10.1016/j.erss.2022.102934>
- IEA (2023). Italy 2023. *IEA*, Paris <https://www.iea.org/reports/italy-2023>, Licence: CC BY 4.0
- Lind, J., Press, D.G. (2018). Markets or Mercantilism? How China Secures Its Energy Supplies. *International Security*, 42 (4): 170–204. doi: [https://doi.org/10.1162/isec\\_a\\_00310](https://doi.org/10.1162/isec_a_00310)
- Maliszewska-Nienartowicz, J. (2024). Impact of russia's invasion of ukraine on renewable energy development in germany and italy. *Utilities Policy*, 87, 101731. <https://10.1016/j.jup.2024.101731>
- McWilliams, B., Sgaravatti, G., Tagliapietra, S., & Zachmann, G. (2023). How would the european union fare without russian energy? *Energy Policy*, 174, 113413. <https://10.1016/j.enpol.2022.113413>
- Nascia, L., Simone, G., Pianta, M. (2023). Aligning social and climate objectives: the effects of the fossil fuel price crisis – the case of Italy. Brussels, *Response measures to the energy crisis: policy targeting and climate trade-offs* (2023). Available at: [http://works.bepress.com/mario\\_pianta/268/](http://works.bepress.com/mario_pianta/268/)
- OurWorldInData (2024). Electricity production by source, Italy. <https://ourworldindata.org/grapher/electricity-prod-source-stacked?country=~ITA>
- Pastore, L. M., Lo Basso, G., & de Santoli, L. (2022). Towards a dramatic reduction in the European natural gas consumption: Italy as a case study. *Journal of Cleaner Production*, 369, 133377. <https://10.1016/j.jclepro.2022.133377>
- Prontera, A. (2024). Winter is coming: Russian gas, Italy and the post-war European politics of energy security. *West European Politics*, 47:2, 382-407, DOI: 10.1080/01402382.2023.2225987
- Prontera, A., Lizzi, R. (2023). The necessary reorientation of Italian energy policy, *Contemporary Italian Politics*, 15:2, 252-268, DOI: 10.1080/23248823.2023.2193462

Sarno, G.S., Rizzi, A. (2022). Powering Change. Italian and EU Energy Transition in Times of War. *IAI*, N 22|23, DOI: 978-88-9368-262-6

Sassi, F. (2023). Idrogeno: i paradossi del Corridoio Sud. *ISPI*,  
<https://www.ispionline.it/it/pubblicazione/idrogeno-i-paradossi-del-corridoio-sud-156074>

Sassi, F. (2024). Vertice Italia-Africa e Piano Mattei: Italia hub del gas (algerino). *RivistaEnergia*,  
<https://www.rivistaenergia.it/2024/02/piano-mattei-italia-algeria/>

Siddi, M. (2018). The Role of Power in EU–Russia Energy Relations: The Interplay between Markets and Geopolitics. *Europe-Asia Studies*, 70(10), 1552–1571.  
<https://doi.org/10.1080/09668136.2018.1536925>

Siddi, M. (2018). The Role of Power in EU–Russia Energy Relations: The Interplay between Markets and Geopolitics. *Europe-Asia Studies*, 70:10, 1552-1571, DOI:  
10.1080/09668136.2018.1536925

Siddi, M., & Prandin, F. (2023). Governing the EU’s Energy Crisis: The European Commission’s Geopolitical Turn and its Pitfalls. *Politics and Governance*, 11(4), 286-296.  
doi:<https://doi.org/10.17645/pag.v11i4.7315>

Skalamera, M. (2023). The Geopolitics of Energy after the Invasion of Ukraine. *The Washington Quarterly*, 46(1), 7–24. <https://doi.org/10.1080/0163660X.2023.2190632>

Skalamera, M. (2023). The Geopolitics of Energy after the Invasion of Ukraine. *The Washington Quarterly*, 46:1, 7-24, DOI: 10.1080/0163660X.2023.2190632

Snam (2023). FY 2022 Consolidated Results

Snam (2024). FY 2023 Consolidated Results

Statista (2024). Imports and production of natural gas in Italy from 1st half 2021 to 2nd half 2023, by country of origin, pipeline, and entry point. <https://www.statista.com/statistics/1325804/natural-gas-supply-in-italy-by-origin/>

Varvelli, A. (2023). Gassy ambitions: The obstacles to Italy’s planned gas hub for Europe. *European Council on Foreign Relations*, <https://ecfr.eu/article/gassy-ambitions-the-obstacles-to-italys-planned-gas-hub-for-europe/>