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Of hopeful narratives and historical injustices – An analysis of just transition narratives in European coal regions

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ABSTRACT

In recent years, the public discourse on the phase-out of carbon-intensive technologies and practices has come to a near consensus that a “just transition” is required. Yet, this term seems to have as many meanings as there are stakeholders using it. The purpose of this paper is to unpack the different meanings that regional stakeholders assign to it and the underlying dimensions of (in)justice that they invoke in their political communication.

To this end, we employ a policy narrative analysis to study and compare the political discourse in four European coal and carbon-intensive mining regions: Ida-Virumaa (Estonia, oil shale), the Rhenish mining region (Germany, lignite), Upper Silesia (Poland, hard coal) and Western Macedonia (Greece, lignite). Specifically, we address the following research questions: Which narratives are characterising the political discourse around just transition? Which (in)justices are being invoked? Which patterns, similarities or differences are recognizable between regions?

We found that hopeful narratives describing structural change as an opportunity to reinvent the region are prevalent in all regions. Strong narratives of resistance only prevail in Upper Silesia and Ida-Virumaa where a phase-out decision has not yet been adopted. In terms of injustices, we find surprisingly little evidence that injustices related to the immediate effects of the transformation (e.g. lay-offs and compensation for workers and companies) play an important role. Instead, the aspects related to the historical injustices produced by the legacy industrial system prevail. And perhaps most importantly, questions about access and allocation of the opportunities of the imminent transition are key and should be addressed more explicitly.

1. Introduction

With the European Green Deal, the EU has set out to become the first carbon neutral continent [1]. To achieve this, the use of coal and other solid fossil fuels needs to be phased out as a matter of priority. Yet, their production is mostly concentrated in a limited number of regions whose economic and social structure critically depend on this industry [2–4]. These regions face tremendous challenges as they will experience in many cases dramatic structural changes [2–5]. The uncertain outlook often translates to anxiety and in many cases resistance against the drive

for decarbonization [6].

It has been widely acknowledged that a just transition is necessary to address the looming societal hardship and reduce resistance [1,7–9]. The “Just Transition” concept originated from the labour movement that emphasises the just transition of and for the workforce, particularly those who are employed in the mining and energy industries [10–12]. Others define the term more as a holistic approach to transitioning to a more sustainable energy system that takes into account the economic, social, and environmental impacts of the transition on all members of society [12–14]. Yet in practice, it seems to have as many meanings as

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there are stakeholders using this concept. This ambiguity may promote what Eisenberg [15] calls “unified diversity” thus enabling a constructive discourse. Yet, the variety of meanings underneath the surface of the just transition paradigm may also conceal conflict: while some actors employ versions of the just transition narrative to accelerate a transformation away from fossil fuels, others might employ seemingly similar narratives to delay the transformation by stipulating that only a slow transition can be just [see also [16]].

The variation of the concept as well as its operationalization have become an increasingly popular theme for scientific inquiry [12,17,18]. Yet, what is lacking so far is an empirically grounded analysis of the varieties of the “just transition”-narrative and the strategic employment of these varied narratives in the debate surrounding the decarbonisation of the carbon-intensive economies at the regional level, especially with a comparative perspective. We do so by focusing on four particularly exposed European regions: the Rhenish mining region (RR) in Germany, Upper Silesia (SL) in Poland, Western Macedonia (WM) in Greece and Ida-Virumaa (IV) in Estonia. These regions represent a high degree of diversity (see Section 3).

Specifically, we will address the following research questions:

- Which narratives are characterising the political discourse around just transition?
- Which (in)justices are being invoked by regional stakeholders?
- Which patterns, similarities or differences are recognizable between regions?

We will address these questions by employing the Narrative Policy Framework (NPF) to study the prevalent policy narratives [19]. We define a policy narrative as a story told about a policy issue and its solution. It is never objective, instead it takes a certain interpretative perspective on the policy problem and argues for a certain policy solution, because the narrator (= stakeholder) holds certain policy beliefs and hopes to achieve certain political objectives by employing a particular strategy – among other things through telling this story in a certain way. Our assumption is that policy narratives play a crucial role in politics which we define here as the discussion of ideas, the setting of the decision agenda and the mobilisation of groups. We treat policy narratives as the visible outcome of both, the policy beliefs and the policy strategy of the narrator. Thus, policy narratives are a tactical instrument of manipulation and control for the stakeholder (although not necessarily consciously so) and a resource for identifying political strategies for social scientists.

In doing so, our paper contributes an empirically grounded and place-based perspective that is complementary on the burgeoning literature on just transition at the theoretical level and/or focussing on global and national-level discourses (see Section 2 for a brief overview of that literature). Only a few studies have focussed on local or regional level policy processes [20–23] and a comparative perspective covering a range of diverse cases is not available to the best of our knowledge. A key finding of our study is that “narratives of hope” persist in all regions. Framing the transformation as an opportunity to overcome legacy injustices produced by the incumbent fossil fuel regime offer a fulcrum for strategic interventions to reduce resistance and strengthen adaptability of regional stakeholders.

The paper proceeds by briefly reviewing the extant literature on just transitions. In chapter 3 we justify our selection of case studies and introduce the political and socio-economic context of each region. Chapter 4 introduces the research design describing in detail the method and material used for analysis. We then present the results for each of the four cases assessing both the narrative form and content. We present synthesised prototypical policy narratives that prevail in the regional political discourse, we highlight both the variation in use as well as the actors employing each narrative, and we contextualize those narratives by relating them to specific focus on dimensions of (in)justice [24]. After synthesising our findings across all four cases, we discuss

methodological limitations of our study as well as the extent to which the insights of our analysis can be generalised beyond our four cases.

2. Just transition: Conceptual origins and theoretical foundations

As stated in the introduction, the concept of just transition was first introduced by the labour movement as early as the 1990s [10,25]. The international labour organisation defined guidelines for just transition in 2015 [26] focussing mainly but not exclusively on the employment related dimension of just transitions. At the same time, academic research has highlighted the important implications of structural change in coal and carbon-intensive regions on socio-economic dimensions [2,27–29] in general and regional labour markets in particular [30–34].

Yet, the narrow focus on employment and the socio-economic dimension has been a source of criticism and other researchers have argued for a more holistic conception of justice [35] including aspects of energy justice with a focus on consumers [36], climate justice with a focus on international and intergenerational dimensions of inequality [37–40], and environmental justice with a focus on fair and equal distribution of environmental benefits and burdens including on the local level [41]. Wang and Lo [12] provide an extensive review of the just transition concept and its intellectual heritage in these three justice movements [see also 35,18].

Moreover, the just transition literature differentiates between distributional justice – focussing on the equitable distribution of costs and benefits if the transformation, procedural justice – related to transparent decision making processes and due representation, and recognition [36,42] or restorative justice [35] – recognizing previous injustices and vulnerabilities of under or misrepresented groups.

Kanger and Sovacool [24] add a spatial dimension ranging from local implication to the national and international level, as well as a temporal dimension differentiating between “Now (‘it is already happening’)”; “Now to later (‘if current trends continue it will only get worse’)”; and “Later (‘it might happen sometime in the future’)”. While the spatial dimension is less relevant due to our focus on the regional level of just transition, the temporal dimension is crucial for our case given the very different time scales at which transition processes are happening in the four case study regions.

3. Case study context

Studying policy narratives on just transition at the regional level is important for several reasons. Firstly, carbon-intensive industries are often highly concentrated in specific regions, which can expose those regions to significant economic and social challenges as the transition away from these industries takes place. Depending on their political leverage, particularly exposed regions often put up resistance against decarbonization policies at superior governance levels [43,44]. Secondly, the just transition requires a comprehensive and participatory approach that takes into account the specific needs and aspirations of each region [17,45]. Thirdly, the question of “transitioning to what?” is a complex one that cannot be answered through a one-size-fits-all approach. The development of alternative economic activities and industries must be tailored to the unique challenges and opportunities facing each region [46]. Finally, studying policy narratives on just transition at the regional level can help identify the potential barriers and opportunities for the implementation of just transition policies and programs, and help build a better understanding of the local social and cultural contexts. This can ultimately lead to more effective and equitable policy-making, and a more successful transition away from carbon-intensive industries [21,22,47,48].

In order to be able to draw generalizable conclusions from a limited number of case studies, we strategically selected four cases (see Fig. 1) that offer maximum variation across a number of key relevant dimensions [49]: the fuel type with lignite in RR and WM, hard coal in SL,

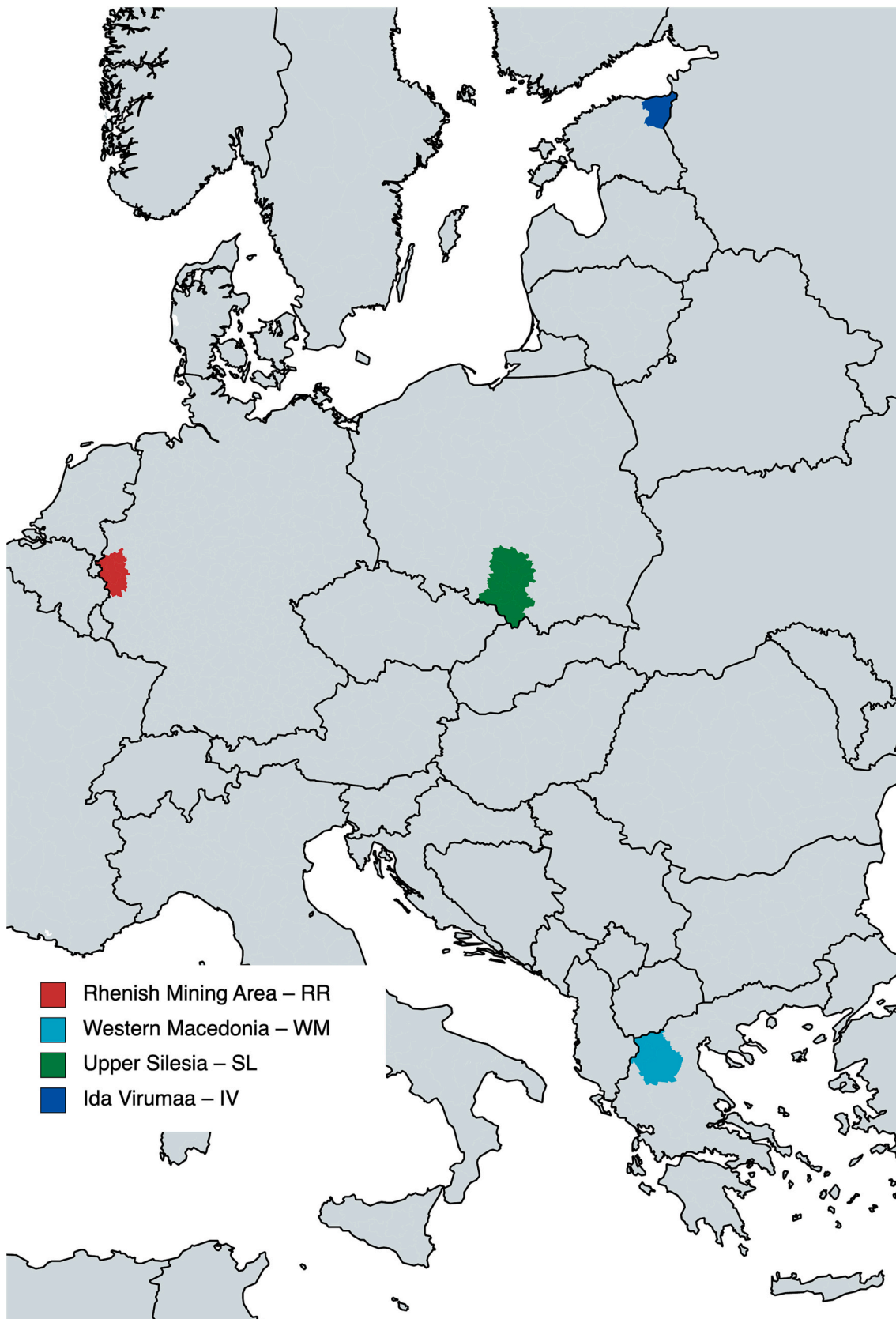


Fig. 1. Map of the four case study regions.

and oil shale in IV; the stages of transformation [50] from very early (IV, SL) to very advanced (RR); the pace of anticipated phase-out from very fast (WM) to very slow (SL); the diversity of the regional industrial structure from “industrial monoculture” (WM, IV) to highly diversified (RR, SL); and a wide degree of overall economic performance both in absolute terms as well as relative to national averages. Beyond this variation, the IV case offers additional potential for generalization as it contributes an extreme case in political terms as the region as well as the workforce in the oil shale industry is dominated by the Russian-speaking minority adding a layer of ethnic tensions to an already contested political discourse.

The political context for these cases obviously also differs with their respective national contexts. Yet, at the European level, the EU's ambition to achieve climate neutrality by 2050, as set out in the European Green Deal, sets the political direction of travel for all regions. [1] In that context, all four regions have recently prepared Territorial Just Transition Plans (TJTP) outlining the challenges in each region, as well as the development needs and objectives [51–54]. The development of the TJTP constituted a major policy process and the approved plans open the gateway to access EU funding to support structural changes in the regions.

The Russian assault on Ukraine marks another key political context affecting all four regions. The war and the consequent energy crisis mark a new energy policy chapter that we cannot adequately reflect within the scope of this article. We therefore decided to limit the study period of our analysis to the time between January 2020 (covering the election campaign of the European elections 2019) until the eve of the Russian invasion.¹ However, since some interviews were conducted later, it was impossible to ignore the implications of the war altogether.

In the remainder of this section, we will briefly introduce each of the four regions and their socio-economic and socio-political context.

The **Rhenish lignite mining area (RR)** is the biggest lignite region in Germany and is mainly located in the three districts Rhein-Erft-Kreis, Kreis Düren, and Rhein-Kreis-Neuss. In those two districts lignite mining and power generation accounted for the highest percentages of gross value added in 2015, at 13 % and 11 % respectively. In contrast, the relative economic significance of lignite in the entire Rhineland lignite region is rather low. Mining and power generation only contribute 0.6 % to value creation and directly employ less than 10,000 people (2017) or roughly 0.3 % of the entire working population [55]. The area has a highly diversified economic structure, but most of the industries are highly carbon-intensive and/or fossil fuel dependent. Directly dependent on the lignite-based electricity infrastructure are for example aluminium smelters as well as pulp and paper industry. Moreover, a considerable petrochemical industry exists in the region with several petroleum refineries and large production plants for chemical raw materials as well as a major production plant of the Ford Motor Company and other automotive suppliers. In total more than 90,000 people are employed in energy-intensive industries. The Rhenish area, being embedded in between the urban centres of Cologne, Düsseldorf and Aachen, offers access to jobs in the service industry as well as to higher education opportunities.

In terms of the phase of transition [50], the RR is approaching the final phase and it seems that the decoupling of the industrial system and regional economy from fossil technology has commenced. The main utility, RWE, has been restructured and overcame a difficult business cycle. While still generating substantial profits from the coal industry, it has started to reorient its business model towards renewable energy.

¹ For the RR case study, we chose the 25 September 2021 as the end of the study period, one day before the federal elections in Germany as this event marks a new chapter of energy policy in Germany the analysis of which would exceed the scope of this article.

Also, according to our interviewees,² the adoption of the coal phase-out schedule has become a watershed moment for both private and public planning resulting in a regional economy that is actively pursuing new opportunities beyond coal.

Western Macedonia (WM) is a region in north-western Greece with a population of 283,600³, a GDP of 4.3 billion euros and with 20 %, the highest unemployment rate in Greece and among the highest in the EU27. In the period 2018–2019 the gross value added (GVA) of Western Macedonia recorded a significant decrease of 8.8 %, the highest at the national level. Lignite activity includes open-cast mines over a total area of 160 km². From the onset of lignite exploitation in the 1950s, six thermal power plants amounting to a total installed power capacity of 4.4 GW have been erected. They cover 70 % of the electric power needed in Greece for the past decades. In terms of lignite mining activity, Western Macedonia ranks in the first place in the Balkans, in the second place in Europe and in the sixth globally. 22,000 job positions are directly or indirectly dependent on the lignite industry. Around 7 % of total local employment is directly linked with the lignite industry. The four currently operating lignite-fired power plants represent 20 % of the total installed capacity of the interconnected system in Greece and approximately 100,000 citizens of the region use district heating systems powered by lignite power plants. The region's economic structure is largely based on the energy mining and electricity production sectors, with the Public Power Corporation being the largest employer [56]. In the early 2010s, more than 34 % of the gross value added of WM derived from the mining and energy sector. On the other hand, the extent, size and the operational needs of the lignite industry have triggered mobility of the local workforce on a large scale, replacing traditional trades and farming activities. The current economic dependency of the region on coal leads to a very high vulnerability when confronted by decarbonization requirements [4,57].

WM has also entered a relatively advanced stage of transformation albeit at a much faster pace than the RR. In 2019, a coal phase-out schedule was adopted to phase out all existing coal-fired power plants by 2023. But due to the energy crisis, a two-year extension was given to the existing lignite unit withdrawal program, resulting in an “informal” extension to the implementation of the territorial just transition plan. The new Ptolemaida V lignite unit with a capacity of 660 MW is scheduled to enter commercial operation in 2023. It is supposed to operate on lignite fuel until 2028 after which it was supposed to be converted to natural gas. However, recent economic and geopolitical developments have called this into question. While the energy system shake-out has already occurred and the main utilities seem to have re-oriented, the fast pace of transformation has taken its toll on the regional economy. Given that it was already among the most disadvantaged regions of Greece, the economic renewal of the region has not yet taken off.

Upper Silesia (SL) is the largest remaining hard coal mining region in the EU in terms of output and – with more than 70,000 directly employed miners – also in terms of employment [5,58,59]. SL is characterised by a high concentration of carbon-intensive industry which produces both steam and coking coal. Since the last four decades, Silesia has been undergoing an economic transition due to the broader economic restructuring and decentralisation of the Polish economy from a centrally planned to a capitalist economy. While the productivity of the traditional coal-related industries has increased, employment and physical output have decreased. And due to internal supply-side factors limiting the competitiveness of the sector (low productivity, high wage pressure) the employment in hard-coal mining is likely to further decline. At the same time the region has seen robust growth in a new manufacturing base, including manufacturing of vehicles and vehicle

² Interview held with a representative of a local trade association on 22 September 2022.

³ According to Hellenic Statistical Authority as of 31/12/2022.

Table 1
Overview of prototypical plots.

Story of decline	At the beginning things were good, but now they are worse. This exemplifies a crisis situation (disaster will follow if nothing is done).
Story of progress	Things were terrible, but now everything is getting better.
Story of restrained progress	Things are not getting better because something/someone is holding us/them back.
Story of illusory progress	Things seem to be getting better. But this is just a superficial impression; things are not actually improving or are even getting worse.
Story of liberation	Things were terrible, but then something happened, and now everything is (quickly) getting better.
Story of helplessness	Life conditions cannot be controlled. We are stooges of our destinies.
Story of control	The problem is under control; everything will be good.
Conspiracy story	Control is in the hands of a few, who use it for their own benefit. Harm is deliberately or knowingly caused.
Blame the victim	Those who suffer from the problem are actually in control. Victims have to reform their own behaviour.

parts. Compared to other Polish regions, unemployment and poverty rates are relatively low although the benefits of growth and costs of restructuring are not distributed evenly across the region. Moreover, Silesia is confronted with challenges of unfinished restructuring of its traditional carbon-intensive industry. The restructuring faces rapidly increasing regulatory pressure, technological disruption which can affect its new specialisation (vehicle manufacturing), ongoing emigration especially among younger generations which mostly concentrates in traditional mining communities (brain drain) and environmental factors negatively affecting the quality of life of its citizens (e.g., air pollution due to coal-based residential heating installations) [60].

Silesia is still in a relatively early stage of transformation. The industrial system has been under economic pressure for quite some time. Many of the Polish mines could not be operated economically during much of the last decade and several rounds of restructuring took place [61]. Meanwhile, the regional economy has developed strongly over the last decade. It features a diverse range of industries so that region's dependency on coal is limited. Still, politically, coal phase-out remains strongly contested. In 2021, the national government and key trade unions achieved an agreement to phase out coal by 2049.⁴ However, negotiations with the European Commission about the compatibility of the agreement with EU climate and energy objectives is still ongoing and the legislative process has yet to be completed.

Ida-Virumaa (IV) is a county located in North-East Estonia. It is a former industrial centre with rich natural resources that has suffered from post-Soviet economic decline (e.g. closure of heavy and textile industries). The county contains large deposits of oil shale that is used in the region's power plants and petrochemical industry. In January 2019, Ida-Viru County had a population of 136,240 (10.3 % of the total population of Estonia). Today, the ethnic composition reflects the mass migration during the Soviet times - 73 % of the population identify as Russians, 19 % Estonians, 2 % Ukrainians, 2 % Belarusians and 1 % Finns.⁵ With 9 %, unemployment in Ida-Virumaa is twice as high as in the rest of Estonia. Direct employment in the oil shale industry is currently around 5000 people and indirect employment around 20,000. There has been a gradual decline of employment by about 500 people per year in the oil shale sector due to efficiency increases in the mining sector, as well as restructuring of electricity and shale oil industries in the region.

While no formal decisions have been adopted to phase out oil shale production and use, political discussions are ongoing and it is clear that IV will have to face substantial economic restructuring and resulting loss of jobs in the oil shale industry, eventually. Although there are some investment projects in the region that promote development of new industries in the area, according to our best knowledge, there has been

⁴ Technically, the agreement only focusses on coal supply and excludes coking coal and lignite, but it covers the bulk of coal extracted in SL.

⁵ The figures are official census data, but ongoing research in our project shows that many Russian-speakers of Ida-Virumaa do not consider themselves "Russians" and moreover these ethnic categories are shifting very much in response to the Russian assault on Ukraine.

no comprehensive assessment of the socioeconomic impacts of transition and subsequent coping mechanisms that need to be implemented.

The fossil fuel phase-out transformation is perhaps least advanced in Ida-Virumaa compared to the other cases explored in this paper. The technological and industrial system is still robust. Key fossil fuel companies are still planning to invest in new refineries effectively expanding the technological-industrial complex. Meanwhile, the region remains disadvantaged compared to other regions in Estonia and the seeds of economic modernization and diversification away from the oil shale industry are only slowly emerging.

4. Research design

Narratives have been identified as a key determinant of the political room to manoeuvre [62,63]. Roe [64] stipulates that narrative policy analysis is particularly useful in situations of profound uncertainty, complexity and polarisation. Arguably, most cases of deep transformations of socio-technical systems and resulting structural adjustments of regional economies are characterised by uncertainty and complexity, while political responses to address these structural changes are often subject to polarised positions. Consequently, narrative analysis has been applied productively in the field of energy transitions in the recent past in a range of studies focusing on energy transition discourses at the international level [e.g. [65–67]] and national level in the US [68], the Netherlands [69], Australia [70] and Germany [30,71].

Following Shanahan et al. [72], we posit that narrative policy analysis entails the integrated assessment of narrative content and narrative form. Narrative form refers to the key structural elements of narratives, whereas narrative contents relate to the meanings constructed in those narratives which reflect beliefs and communicative strategies.

To operationalize the analysis of narrative form, we opted for the NPF [19] complementing it with a systematic differentiation of prototypical plots [derived from 73, see also 68]. The NPF differentiates the narratives' *setting*, *characters*, *plot*, and *moral*. The general setting is similar for all the narratives analysed and reflect the status quo of the structural transformation in each region. The characters usually include a victim, a villain or culprit (depending on the causal mechanism), as well as a hero. Each of these roles can be assumed by individuals, actor groups or even specific artefacts such as renewable energy. For the plot, we build and expand on a typology proposed by Stone (2012). **Table 1** below provides an overview of the plot types identified in this study.

To systematically assess the narrative contents in the light of the research question of this article, we then analysed dimensions of (in)justice reflected in the identified narratives. This serves as a basis for contextualising the results and enabling a meaningful comparative analysis of the four case studies. For this, we revert to the multi-scalar and multi-horizon framework of energy injustice proposed by Kanger and Sovacool [24]. Their framework classifies injustices three major domains of injustice: (1) **old system injustices** that emerge from practices of the old dominant fossil fuel industry system (regime optimization); (2) **transitory injustices** relating to injustices produced from the system transformation process (regime destabilization); and (3) **new**

system injustices that might occur in relation to the emerging new configuration of the regional economy and society (niche acceleration). Within each of these domains we can further differentiate **distributive injustices** related to the inequitable distribution of costs and benefits, **procedural injustices** related to ineffective or inequitable representation in decision making processes, and **recognition injustices** related to the appreciation of existing vulnerabilities and inequalities that should not be worsened [see also 74].

The analysis draws on two types of empirical data: a series of expert interviews⁶ and a selection of policy documents. The expert interviews served the purpose of scoping the most salient issues, identifying relevant stakeholders and providing context for the interpretation of the results of the narrative analysis, especially with respect to the injustices invoked. For the narrative analysis itself, 171 policy documents were selected and analysed. This was done in three distinct steps: (1) Identify key stakeholders based on expert knowledge of the authors,⁷ interviews, and existing literature [57,75,76]. (2) Screen the relevant communication channels (websites, social media, their own member's magazine or newspaper) of each of the identified stakeholders and compile a list of relevant documents in the context of fossil fuel phase-out and structural change published during the study period (01/2019–02/2022). And (3) filter the identified documents based on the following criteria:

- The text must be explicitly related to decarbonization, climate protection and/or structural change.
- The text needs to speak to justice/fairness/equity dimensions. In other words, it must be political.
- The text needs to contain basic elements of policy narratives incl. Key characters and an identifiable plot (not necessarily all elements need to be identifiable).

Moreover, we selected texts so as to avoid duplication in terms of narratives. In case that more than one text from the same actor referred to very similar narrative elements and/or spoke to the same issue, we generally selected documents with a broader coverage. For RR, the first search yielded 369 documents of which 52 were selected for analysis. For SL 219 documents were first identified and 47 analysed. For the cases of WM and IV we adapted our search strategy based on the experiences of the first two cases and applied the search criteria more stringently already in the first round yielding 62 docs for IV (46 analysed) and 37 for WM (26 analysed).

For the analysis, the selected texts were translated into English. Some of the documents were long policy papers or programmes. For those, only the core “political” sections – e.g., the preface, summary, conclusion or mission statement – were translated and uploaded into CATMA, an open-source online software for text-based qualitative research [77]. The actual coding was done in two iterations ensuring that each document was coded by two researchers independently. In the first round, each text was coded by a researcher based in the respective case study region. The first round applied codes related to the actors mentioned in the text as well as various aspects of (in)justices, and specific policy issues such as governance and political institutions, regional industrial structure, labour markets, regional identity, the technical infrastructure or land use and the local environment. While the latter are not explicitly embedded in the theoretical framework, it still helped us to contextualize statements across documents and case studies. In the second iteration, different researchers coded the same text applying codes related to the elements of the NPF.

⁶ In sum a total of 21 interviews were held; 4 in RR (09/2021–11/2021); 4 in SL (05/2022–09/2022), 6 in WM (08/2022–10/2022), and 7 in IV (12/2022–01/2023).

⁷ The team of authors includes researchers located in each of the respective regions with long-standing experience in the regional political environments related to fossil fuel phase-out and structural change.

5. Results

In this section we present the results of the analysis for each of the four regions separately. The main findings are consolidated in the form of 2–3 stylized narratives for each region, followed by an overview of the main proponents of each narrative and its main variants found in the sample.

5.1. Rhenish mining area

The political discourse in the Rhenish mining area is dominated by two major narratives. Both of these are being told with some variance with respect to the plot and some differences in nuance regarding the roles and actors involved.

RR1: *The coal phase-out is an opportunity for social and economic development and an ecological turnover in the region. The state government has created structural support programmes to make the region fit for the future. The business community also embraces the opportunity for the region to become a modern, innovative pilot region. However, this will depend on access to affordable energy in the future, accessibility and non-bureaucratic processes.*

Different versions of this narrative exist. In the majority of instances it is expressed as a story of control [e.g., RR_PA2; RR_PA4; RR_PA6; RR_PA11; RR_SCO4; RR_SCO6; RR_EA1; RR_EA4; RR_LG2] – with particular emphasis on the role of the regional government and/or the innovative businesses of the region – or more generically as a story of progress [e.g., RR_SCO1; RR_SCO2; RR_EA3; RR_EA9; RR_PA1; RR_PA3; RR_PA4; RR_PA10; RR_LG2]. Both of these are featured notably by governmental actors at the local and regional level, by the governing party, as well as local economic actors and utilities. However, some actors reproduce it in its negated form as a counter-narrative [64]. In these instances, it is presented as a story of restrained or illusory progress. These variants portray the regional government and development agencies not as heroes of the story, but rather as culprits of insufficient political and structural support. This critique is voiced most notably from the Green party as well as local groups [e.g., RR_(L)I6; RR_(L)I9; RR_(L)I11; RR_RG1; RR_EG1; RR_PA12; RR_PA13]. However, there are also instances in which local trade associations voiced a toned-down version of this critique [e.g., RR_EA4; RR_EA7; RR_EA11].

The second major narrative reflects disappointed hopes and a loss of confidence in the state government as well as the energy company RWE.

RR2: *The coal phase-out is impeded by the state government and RWE because they favour profit interests. The concerns of the residents or climate policy are secondary. The destruction of the climate and local environment and the forced resettlements will continue. Local residents are resisting this with the support of the climate movement.*

This narrative is primarily based on ‘stories of restrained progress’ that were found in 19 of the analysed texts. It is expressed for example by trade associations of the Rhenish mining area, environmental groups and local residents’ initiatives. These different actors put forward different reasons why the situation in the Rhenish mining area does not improve. While the trade associations criticise the lack of necessary framework conditions for economic development [RR_EA6; RR_EA8; RR_EA11] and uncertain future energy security [RR_EA7], environmental groups and local residents’ initiatives complain about the continued coal mining activities and resettlements which are perceived not to be consistent with the German climate policy [RR_(L)I9; RR_(L)I12; RR_RG1]. Other versions of the narrative exist. The most pessimistic views on the situation can be found in ‘stories of decline’ [e.g., RR_(L)I9; RR_FO2; RR_PA13] and ‘stories of helplessness’ [RR_(L)I9; RR_(L)I10]. Few texts express the view that control is in the hands of the state government and RWE, who work closely together and who knowingly cause damage because of profit interests [RR_(L)I6; RR_(L)I7; RR_(L)I8; RR_(L)I12]. These can be characterised as conspiracy stories. Finally, the

last variant of the narrative are liberation stories [RR_(L)I10; RR_PA10; RR_PA15; RR_SCO2] where either the broader climate movement is presented as a hero who helped to successfully fight against the destruction of the Hambach Forest, or where the villages that are still facing demolition to extend the mine.

In terms of the dimensions of just transition that are being addressed in the documents analysed, there are two notable aspects. First, the more critical, negated versions of this narrative highlight procedural injustice stating that the regional government did not adequately address the concerns of local residents or, as in the case of the trade associations, are overcomplicating access to funding (transitory injustice). Specifically, within the gloomy story of the transformation of the region (RR1), there are competing interests in what will happen to the area when the extensive mining fields are closed. Will the area be used for agricultural purposes [e.g., RR_EA11; RR_SCO1, 80f], for new business parks [e.g., RR_EA8, RR_EA9; RR_EA11], shall there be an exclusive room to develop new modes of living and working in a more community-based and solidaric structure [e.g., RR_(L)I7], or will the former mines be turned into lakes with significant touristic value? [e.g., RR_SCO5; RR_SCO7] And how and by whom will these decisions be made?

Documents referring to RR2 mainly feature injustices produced by the incumbent carbon-intensive industry system, but at two very different geographical and temporal scales: on the one hand this relates to the injustice of the demolition of villages and ancient forests at the margins of the existing mines. According to those stakeholders [and supported by scientific research by 78,79] the agreed coal phase-out schedule does no longer require the destruction of those areas. Still, the state government of North Rhine-Westphalia (NRW) has prescribed the necessity of exhausting the mines in a key legal decision thus enabling RWE to rush ahead. One of the documents refers to climate activists describing the state government as a stooge of RWE and holding up banners referring to “NRWE” thereby reproducing a conspiracy theory variant of this narrative [RR_FO1]. The second major injustice invoked in this narrative is the intergenerational and international injustice of climate change, an old system injustice featuring aspects of distribution and recognition. According to the majority of the documents analysed, the coal phase-out schedule and its implementation are out of line with German responsibilities under the Paris Agreement and hence exacerbating climate injustice globally.

5.2. Western Macedonia

The transformation process in Western Macedonia is by far the fastest compared to the other cases. Opposition had been strong for many years, mainly prior to the period of our analysis, thus delaying any actions towards the phase out. Still, since the political decision to phase out lignite mining and lignite-based electricity generation (delignification) was taken, it has been hardly contested. However, the pace of the transformation very much is. Two major narratives are competing in the region.

WM1: *Delignification is ultimately inevitable. Nevertheless, it should become a major opportunity for the region. With the support of funding from the Just Transition Fund we can build a research and innovation ecosystem with universities and agile businesses of our region. We will unleash green growth in Western Macedonia.*

Local and national authorities, research organisations and environmental groups employ this narrative, either in mode of a generic story of progress [WM_EA3; WM_RO2; WM_FO1; WM_FO4; WM_PA8; WM_PA10] or as a story of control [WM_SCO1; WM_SCO2; WM_EG1; WM_PA9] in which the role of government (across various levels) is highlighted. The narrative is contested to the extent to how the governance of the transformation of the regions should be implemented. More critical voices highlight the need to involve local stakeholders and municipalities more proactively.

Interestingly, in the period of analysis, none of the surveyed

documents outright negated the above narrative. The inevitability for lignite phase-out seemed to be widely acknowledged. This was also confirmed in the interviews held. However, many actors from trade unions and some local governments felt overwhelmed by the pace of the transformation and ask for a delay. One of our interviewees called it a “doctrine of shock” employed by the national government pushing through its plans without taking into account regional concerns. These sentiments of anxiety were expressed mostly in the form of stories of decline [WM:FO2; WM_LG1; WM_PA4; WM_PA14; WM_EA5] or illusory progress [WM_PA2; WM_PA4; WM_PA6; WM_PA11; WM_LG1].

WM2: *The breakneck speed of the delignification process will kill the industrial base of Western Macedonia and disrupt the regional economy. Moreover, we will also increase our dependence on other fossil fuels. The structural funding provided and corresponding transition planning are insufficient to avoid the demise of Western Macedonia.*

While certainly not a salient narrative in the regional discourse, a special mention needs to be made of a blame-the-victim plot. We only found one instance, but a very prominent one. In an interview with the Greek Prime Minister, Kyriakos Mitsotakis, he states that “It is at least provocative that some crocodile tears should pour. Some cry for lignite when they did little to prepare the region for the day after lignite.”⁸ While this notion is certainly rather an outlier in the communication we analysed, still the substance is also recognized by local stakeholders. In one of our interviews, a local mayor highlighted that despite warnings even from executives within the lignite industry as early as the 1980s, no alternative actions were launched nor alternative directions of development sought. Thereby the regional stakeholders express a concern over lack of preparedness and increasing vulnerability of the region.

Both of the above-mentioned narratives concern injustices related to the destabilization of the old system and the transformation process itself. The first implicitly refers to procedural justice dimension focussing on the fact that key decisions have been taken in Athens and without the broad involvement of regional stakeholders. Crucially, this also applies to the just transition planning processes and somewhat surprisingly also regarding investments in renewable energy supply which have been described by several interviewees as uncontrolled and anarchic in the absence of proper zoning practices in place.

The second major injustice invoked relates to distributional aspects. Many stakeholders are anxious about the collapse of the regional economy and subsequently society due to the pace of the transformation. They also express strong concerns on the negative outcomes on internal migration flows, with younger population abandoning the region *en masse*. While this is superficially also a transitory injustice originating from the destabilization of the lignite industry, underneath we find old system injustices that exacerbate the anticipated injustices. These injustices are well depicted in the unemployment rate of the region and the lower-than-national economic growth rates. Specifically, the neglect of alternative development directions, the lack of investment of coal revenues in diversifying the regional economy and, as a result, the total dependence of the coal industry not only in economic but also in social, political, and educational aspects. The fact that the inevitability of the delignification has so widely been accepted has to do with the fact that the industry was already in demise before the phase-out decision was taken and have left the region with an exceptionally disadvantageous starting point for the transformation with the highest unemployment rate in the country.

⁸ This statement was made on 6 April 2022. Technically the document was outside of our study period. But due to the prominence of the speaker and the fact that this narrative also resonates with our interviews, we nevertheless decided to include it in our analysis.

5.3. Upper Silesia

Unlike the German case, the discourse in Upper Silesia is much more diverse in terms of the narratives employed. A key theme across almost all documents, however, is the acknowledgement of the complexity and grand magnitude of the transformation challenge ahead. For some actors, it seems that this complexity is almost paralysing to the extent that there is no clear narrative following [SL_EA5; SL_PA9]. It is almost an incomplete story of helplessness. But the most salient narrative following from that realisation was a story of decline [SL_EA5; SL_LG2; SL_LG4; SL_LG8; SL_LG11; SL_FO4; SL_PA13; SL(L)I2] or restrained progress [SL_RO3; SL_PA1; SL_PA9; SL(L)I1; SL_EG1]:

SL1: *The coal industry is the backbone of prosperity in Silesia. Phasing out coal will lead to the demise of the region. The money provided by the EU to support a just transition is only “money for our own funeral” [SL_LG2].*

Some variants of this narrative also highlight the ominous role of the EU and other European governments including Germany in imposing the coal phase-out on Poland. In these cases, the story of decline turned into an outright populist conspiracy theory with the Brussels elite as the main culprit for the looming demise of the region. The most vociferous proponents of this narrative were trade unions including the historically important Solidarność movement [SL_LG12; SL_LG11; SL_LG9]. But other actors – trade associations, other industrial corporations, and utilities – also shared sometimes slightly toned-down versions of it.

The counter-narrative to SL1 starts from the same acknowledgment of the complexity of the task, but highlights the opportunity that comes with the support through the European Green Deal and the Just Transition Fund.

SL2: *The European Green Deal and the Just Transition Funds provide a great opportunity for Silesia to accelerate its “metamorphosis” [SL_PA4], to speed up a process of structural change that will be inevitable. Silesia has a great potential to become a “locomotive of growth” [SL_PA1] for Poland as a whole. But this will fail if the process is steered top-down from Warsaw. Instead, we need to develop plans in the region with strong participation from local stakeholders and municipalities.*

Mostly, this narrative is presented as a story of progress [SL_EG1; SL_EG2; SL_PA2; SL_PA10; SL_FO1; SL_EA1; SL_L(I)3; SL_RO1] or story of control [SL_FO3; SL_L(I)1; SL_EG1; SL_EA6] when emphasising the role of government. More cautious variants also exist which usually present this narrative as a story of restrained progress and questioning the efficacy of the governance of structural change [SL_EG1; SL_L(I)4; SL_LG8]. Generally, this narrative is mostly employed by environmental groups, local activists, research organisations and local development agencies. But even the representatives of the governing PiS party use this stance.

Finally, we identified a third narrative. This one proposes coal as the only viable solution for the complex challenge of securing affordable energy supply.

SL3: *Affordable and secure energy supply can only be provided by domestic coal. New ‘clean coal’ technologies will allow the sector to improve environmental performance. Clean coal is necessary to heat homes in the region and coal can even be used as a feedstock for other industries, not only as a fuel.*

Variations of this narrative are employed by coal companies, trade unions but also some local and national level policy makers. They vary in their use of plots from stories of control – clean coal is on its way [SL_PA12; SL_LG8; SL_FO4; SL_LG6; SL_EA5] – to stories of restrained

progress – restrictive climate policies are blocking the full potential to develop clean coal [SL_PA9; SL_LG8]. Meanwhile many civil society actors, environmental groups and some political actors forcefully reject this narrative. In their response they reproduce the same narrative but couching it in a story of illusory progress highlighting that the idea of clean coal is just a myth that is used to mislead people in the region [SL_EG3; SL_EG3; SL_RO3].

The key injustice dimensions featured in SL1 relate to transitory injustices. The proponents of this narrative anticipate that the destabilization of the coal industry will also destabilize the entire regional economy. Our interviews revealed that there is ample evidence of similar processes in the past both during the post-communist transformation of the 1990s and more recently after economic turmoil and mine closures in places that have left behind a “degraded city (Bytom), in which the process of rebirth and the fabric of this social, especially some urban class, will probably take years.” The second major injustice dimension is about procedural aspects. Key proponents take issue with the fact that decisions are taken in Brussels or Warsaw without taking into account the specific circumstances and consequences at the local level.

Similarly, SL2 most prominently features aspects of procedural justice during the transition period. Stakeholders featuring this narrative highlight the role that local stakeholders should have in developing and implementing the transition plans in their region. Implicitly, this also relates to distribution of opportunities arising from the emerging new system, though. They also highlight that there has been negligence on the part of the government (both regional and national) to anticipate and prepare the transformative processes during the past decade.

Finally, SL3 obviously recognizes some of the injustices related to the old coal-based industrial system. There only is a need for clean coal if you acknowledge that coal is a pollutant in the first place. Also in our interviews, respondents recognized the need to overcome coal use especially in heating systems which are a major source of local air pollution. Moreover, SL3 also relates to several aspects of perceived injustice related to the anticipated new energy/regional industrial system. In the view of the stakeholders featuring this narrative, a future without coal would waste technological potential and therefore waste economic opportunity. Also, they express concerns that insecure or unaffordable energy supply could affect the entire economy.

5.4. Ida-Virumaa

The situation in Ida-Virumaa is quite distinct from the other three cases for two main reasons: oil shale is not only used as a fuel for electricity generation but also as feedstock for the petrochemical industry; and, secondly, due to the dominating ethnic (mainly Russian) minorities in Ida-Viru County and the close vicinity to Russia with looming security concerns. We found both of these aspects featured in the region's policy narratives.

IV1a: *Oil shale is the only reliable form of domestic energy and has been the backbone for energy security. Its use cannot be phased out as alternative solutions will neither be available quickly enough nor will they be reliable enough to secure supplies. And increasing dependency on Russian natural gas imports would thwart national security.*

IV1b: *There is plenty of space for continued use of oil shale products in a diversified Estonian energy system. Shutting down the oil shale sector would be premature. While its use might be phased out for electricity generation, there will be continued demand for it as a feedstock for the chemical industry or as a liquid fuel for international shipping or export. Instead of phasing out, we should explore the possibilities for developing*

more modern, environmentally friendly technologies to keep the sector going.

Both of these narratives clearly resist full decarbonization of the industry and they are almost exclusively used as complements in the same documents. Usually, this is in the form of a story of control [IV_PA4; IV_PA8; IV_PA14; IV_PA16 IV_PA17; IV_FO2; IV_PA23; IV_PA13] when the emphasis is placed on the second part of the narrative (IV1b). This narrative was mostly used by governmental parties on the national and local level. But we also found examples in which the narrative is used as a story of decline or restrained progress. In those instances, European climate and energy policy including the European Green Deal is invoked as threatening economic and energy security of the region [IV_PA16; IV_PA22; IV_EA4; IV_PA25; IV_PA8]. Here mainly the right-wing opposition parties⁹ and shale oil producers point to the challenges of decarbonisation.

Besides these two narratives of resistance, we found two juxtaposing narratives of adaptation and change. Both start from a common starting point recognizing the dramatic changes that lie ahead for Ida-Virumaa. Yet, the first one highlights the opportunity that this entails whereas the second raises fears of economic and social collapse.

IV2: *The fate of the oil shale industry is inevitable and will bring major socio-economic challenges for Ida-Virumaa. But the European Green Deal and the Just Transition Fund create an opportunity to make a major leap towards renewal of the region. Building on its industrial heritage, its education infrastructure and its small and medium enterprises, Ida-Virumaa can start to diversify its energy-focused economy towards renewable energy, hydrogen and circular economy while also strengthening the services and manufacturing sector. But if we continue to invest in the oil shale industry, we will miss out on this opportunity and risk losing vital support from the EU. Concrete targets and budgets are needed.*

This narrative most frequently occurs either as a story of control [IV_PA1; IV_FO1; IV_PA3], as a story of progress [IV_PA4; IV_PA9; IV_PA20; IV_PA27; IV_PA2, IV_PA6; IV_FO2], or as a story of restrained progress [IV_PA12; IV_PA17; IV_PA19] if the emphasis is placed on the last aspect of the narrative. Not surprisingly, the story of control was mainly used by political actors in power. In this case, the narrative is closely linked to a negation of narrative IV1b above.

The pessimistic, almost apocalyptic counter-narrative to this optimistic one is most often portrayed as a story of decline [IV_LG1; IV_PA16; IV_FO1; IV_FO2; IV_FO4; IV_RO2;] or story of helplessness [IV_FO4]. Here trade unions, research organisations and local newspapers often focus on social hardship of decarbonisation:

IV3: *The oil shale industry has been in decline for the past decade. Its ultimate demise is inevitable and may bring social and economic disaster. Neither the industry nor the region is ready for the socio-economic consequences. Already today, the region suffers from a bundle of technological and social problems (e.g. high unemployment rate) which will be exacerbated by the phase-out of the oil shale industry. Among them, the exodus of young people from the county is one of the biggest problems. The region has failed to prepare for this with targeted measures to diversify the region. Money from EU transition funds is not enough. Unfortunately, there are no good solutions.*

Much like SL3 the techno-optimist narratives IV1a and IV1b implicitly relate to old system injustices of the environmental pollution being created as well as new system injustices in the sense of the lost

⁹ During our study period, the Estonian government changed. The parties referred to as opposition here (Centre Party, right-wing populist Estonian Conservative National Party (EKRE) and conservative Isamaa) formed a government under the leadership of Jüri Ratas. In January 2021 the government was replaced by a government under the leadership of Kaja Kallas including her Reform Party, Isamaa and the Social Democrats. The statements referred to here, originate from the later phase of the study period.

opportunities that a “premature” demise of the oil shale industry would imply for the region and Estonia as a whole. However, this injustice dimension is further complicated by the fact that Estonian oil shale is seen as a bulwark against (energy) dependency from Russia.

The peculiar geographical and ethnic situation of IV also features strongly as backdrop for IV2 and IV3. As one of our interviewees, an ethnic Estonian who moved to IV from Tallinn commented: “When I started to work here, my friends said that it was like a near abroad. That the Estonian border ends at Rakvere (last city before Ida-Viru County) and then starts this funny grey area before Russia, which nobody really knows.” Inversely, many members of the Russian-speaking population of Ida-Viru County have a “kind of cautious, suspicious attitude towards the state, that is, this thinking that the state undervalues them, you know, as a region, and the attitude that the state doesn't care about them,” according to another interviewee (ethnic Russian). Together with the strong, almost exclusive focus on the oil-shale industry in economic terms, has created a situation in the region that has led generations of high-skilled entrepreneurially-minded youngsters to emigrate and makes it almost impossible to attract skilled professionals to immigrate.

The proponents of IV2 and IV3 differ in that IV2 sees the imminent structural change in general and the Just Transition process in particular as key opportunities to break the deadlock and change the reputation of IV completely. They highlight procedural justice focussing on local stakeholders that must be involved often criticising centralized planning in Tallinn. Meanwhile, proponents of IV3 are less optimistic and see the demise of the region as inevitable. This is again routed in old-system injustices in that they lament that the strong focus on the oil-shale industry (industrial “monoculture”) has been so hegemonic that there are no alternative scenarios. “Just transition should have started ten years earlier. [...] Considering our region, we would have saved thousands of people who have already moved out of the county today. I am very sorry because it is mostly the more entrepreneurial people who have moved away.”

6. Discussion and conclusion

Across all four cases, we can identify a series of key commonalities, some of which might hold relevance for other cases across the EU and globally. In this section we summarize our key findings and discuss their general relevance.

Our first main finding is that across all four regions we find hopeful narratives embracing the impending structural changes as an opportunity to reinvent the region and to overcome the fossil fuel industry legacy and the economic, social and environmental injustices it has produced. In the RR and WM, where a more advanced stage of transformation has been achieved and the coal phase-out has been scheduled, this narrative is strongly used by public authorities and politicians of the governing parties. In the other regions, the narrative is more limited to progressive actors (think tanks, environmental groups, progressive parties/politicians).

Meanwhile, we found prominent narratives of resistance only in IV and SL. Specifically, these narratives employ a strategy of what Geels [80] calls material resistance, i.e. arguing for technical improvements in the carbon intensive-industry that make a phase-out unnecessary. We found no evidence for such narrative strategies in the more advanced transformations in RR and WM.

From our four case studies we can conclude that the final phase-out decision resulted in a watershed moment for regional development redirecting communicative resources from resistance towards adapting to the new situation. It was critical to unleash motivation and innovative capacity towards adapting to the new situation in RR and WM which is evident in the broad support for the opportunity narratives by public and business actors in both regions. This moment has not yet been achieved in IV or SL.

But to what extent can we generalize from the four case studies? The

policy processes leading to those decisions could have been hardly more different. In RR, the phase-out decision was prepared by a participatory process and in the German coal commission in which stakeholder including local residents were reflected [43]. The commission recommended a phase-out with a very long-time horizon [43]. In contrast, the phase-out schedule for WM was adopted by the national government quickly after the general elections and the timeline is extremely ambitious and has been referred to even as “shock doctrine” [57]. The two regions are also on opposites of the spectrum related to their overall economic performance and industrial diversification with IV and SL falling in the spectrum between them. We are therefore confident that this finding will also apply to other cases beyond our study.

Our second main finding is that the management of the transition remains contested. That is related to both the pace of transition as well as the governance processes. Yet, the reasons for contestation differ, especially regarding the pace of transformation. While in the RR stakeholders posit that transformation is not fast enough and fails to resolve key injustices produced by the coal industry (consistency with climate change mitigation responsibilities and safeguarding local villages and natural habitats that were supposed to be consumed by the mine). Meanwhile, in WM the main criticism is that the pace of the phase-out is overtaxing.

The quality of the governance processes is very much related to aspects of procedural justice. In order to leverage the positive narratives outlined above, regional stakeholders not only require financial means but also the power to develop a common vision and shape the region's fate instead of being subjected to decisions made in capitals or company headquarters [see also 45,81]. But this is not only a question of procedural justice, but also yields a distributional perspective. Regional stakeholders across all regions highlight the need to fairly allocate the opportunities of structural adjustments. Who gets to benefit from the structural funding becoming available from national and/or EU sources? Who gets to participate in the development of new economic visions?

Our third and final key finding relates to legacy injustices produced by the old fossil fuel industrial system, specifically the environmental and health damage the mining operations have produced. Interestingly, even the material resistance narratives IV1b and SL3 acknowledge these injustices. Yet, questions related to the compensation of workers currently employed in the fossil fuel industry and compensation for the very companies, while present especially in SL and IV, was not among the most salient issues in all four regions. This is all the more surprising given the prominent role that trade unions have played historically shaping the just transition discourse and their active engagement also in all of our case study regions [21,30]. Our study shows that also the narratives employed by trade unions vary significantly. In our four case study regions, trade unions also joint the stances of many other economic actors that foreground more general concerns of the overall economic performance of the regions rooted in the failure to develop alternative economic activities in the past.

Due to the strategic selection of our case studies, we are confident that similar results can be found in a wide range of regions [49]. Still, there are some obvious limitations with respect to the generalisability of our findings. This is mostly related to the methodological approach. The dataset analysed was developed covering the spectrum of political discourses and all relevant stakeholders. But the limited number of documents and their diverse provenance does not allow us to gauge the dominance or power of different narratives. For this, additional research would be needed, perhaps examining newspaper coverage or including

representative surveys.

Finally, we must admit that this study was performed during a time when the energy policy debate experienced dramatic changes. Our study period ended when the Russian assault on Ukraine began, upending an energy policy and energy economics as we knew it. In our analysis, matters of energy security were prominent only in IV due to its particular history. It was also somewhat relevant in WM and SL, but played only a subordinate role in RR. This has now changed dramatically and we are observing a vastly different political discourse that has overriden many of the narratives presented above. How these changes will play out in the long-term cannot be known.

Overall, our analysis demonstrates that just transition narratives are highly diverse. On the ground, they often differ from the international narratives that are frequently putting labour-related issues and compensation front and centre. One of the key lessons learned in the process is that looking at justice in abstract terms is elusive and rarely discursively productive. Yet, whenever we looked for specific INjustices, a much more nuanced conversation was possible. While not technically a result of our analysis, we still realised that unpacking these injustices is key to understanding the opportunities for structural change programming and planning to actually improve the living conditions of the affected communities. To date, questions related to just access and participation in the opportunities arising from the transformation are mostly hidden under the surface. Making them explicit and building new narratives that tackle those injustices should help to advance a successful transformation across all regions.

Declaration of competing interest

We hereby declare that we are not aware of any potentially conflicting interests.

Data availability

A full list of documents analysed is included as an annex. Interview data can be made available upon request, but will only be stored for 3 years after the project duration.

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ANNEX: Overview of documents analysed

Codes key:

RG: Religious Groups.
 (L)I: (Local) Initiative.
 EG: Environmental Group.
 EA: Economic Actor.
 SCO: Structural Change Organisation.
 PA: Political Actor.
 LG: Lobbyist Groups.
 RO: Research Organisation.
 FO: Further Organisation.

Code	Name of actor	Title of document	Link
RR_RG1	Rheinisch Mining Area, German (RR) Kirchenkreis Jülich	Hoffnung auf Zukunft - Ja zur Heimat	https://www.kkrjuelich.de/fileadmin/documents/Ja_zur_Heimat_neu.pdf
RR_(L)I1	Aktionsbündnis Stommelner Bürger (Leben ohne Braunkohle LoB)	Presseinformation	https://lob-stommel.de/wp-content/uploads/2019/03/19-03-17-PI-LoB-wartet-auf-Antwort.pdf
RR_(L)I2	Buier für Buir	Restsee Hambach ist Utopie	https://www.facebook.com/BuiererFuerBuir/posts/1856503431165231
RR_(L)I3	Buier für Buir	Rheinisches Revier: Pinkwart kündigt über 6000 Arbeitsplätze in Zukunftsbranchen an	(Facebook Post)
RR_(L)I4	Ende Gelände	Tag X ist jetzt	(Facebook Post)
RR_(L)I5	Ende Gelände	Dezentral im Rheinland	(Facebook Post)
RR_(L)I6	Ende Gelände	Alle Dörfer bleiben - kommt und kämpft mit uns	(Facebook Post)
RR_(L)I7	Rheinland der gemeinschaft	Nach der Kohle: Das Rheinland der Gemeinschaft bauen	https://rheinlanddergemeinschaft.noblogs.org/files/2019/12/Booklet-Klima_screen.pdf
RR_(L)I8	Alle Dörfer bleiben e.V.	Gerade jetzt werden wir bleiben	(Facebook Post)
RR_(L)I9	Alle Dörfer bleiben e.V.	Tagebau-Betroffene	(Facebook Post)
RR_(L)I10	Alle Dörfer bleiben e.V.	“Alle Dörfer bleiben” zum Kohleausstieg	https://verheizte-heimat.de/2020/01/16/alle-doerfer-bleiben-zum-kohleausstieg-sechs-weitere-doerfer-sollen-in-nrw-zerstoert-werden-pariser-klimaziele-unerreichbar/
RR_(L)I11	Klima Allianz	Armin Laschets Leitentscheidung nicht zukunftsfähig	https://www.klima-allianz.de/presse/meldung/armin-laschets-leitentscheidung-nicht-zukunftsfaehig-kampf-um-klima-doerfer-und-hambi-geht-weiter
RR_(L)I12	Klima Allianz	Offener Brief an NRW-Ministerpräsidenten Laschet	https://www.klima-allianz.de/presse/meldung/laschet
RR_EG1	Germanwatch	Ambitionierten Strukturwandel wird es nur bei ambitionierten Kohleausstieg geben	https://germanwatch.org/de/16218
RR_FO1	Solarenergie Förderverein	NRW: Energiewende auf dem Abstellgleis	https://www.sfv.de/artikel/nrw-energiewende-auf-dem-abstellgleis
RR_FO2	verheizte-heimat.org	SOS aus Lützerath	https://verheizte-heimat.de/2020/11/05/sos-aus-luetzerath/
RR_EA1	RWE Power AG	Umsiedlungen im Rheinland	https://www.rwe.com/-/media/RWE/documents/10-nachbarschaft/umsiedlung/Umsiedlungen-im-Rheinland-Partnerschaft-sichert-Sozialvertraeglichkeit.pdf
RR_EA2	RWE Power AG	Landesregierung legt Entwurf für Leitentscheidung vor: RWE wird Beteiligungsverfahren konstruktiv begleiten	https://www.rwe.com/presse/rwe-power/2020-10-08-rwe-power-zum-entwurf-der-leitentscheidung
RR_EA3	RWE Power AG	Erste Spielgeräte werden im Vorgriff auf das Baugebiet aufgestellt	https://www.rwe.com/presse/rwe-power/2020-06-16-erste-spielgeraete-werden-im-vorgriff-auf-das-baugebiet-aufgestellt
RR_EA4	IHK Aachen	IHK bewertet Beschluss der Kohlekommission positiv	https://www.aachen.ihk.de/innovation/energie/energiewende2/kohleausstieg-4303910
RR_EA5	IHK Köln	IHK Köln zur Kommunalwahl im Rhein-Erft-Kreis: Zukunft des Rheinischen Reviers aktiv gestalten	https://ihk-koeln.de/hauptnavigation/presse/pressemitteilungen2020/pm-kommunalwahl-rhein-erft-5170352
RR_EA6	IHK Köln	Unterzeichnung Reviervvertrag	https://ihk-koeln.de/hauptnavigation/presse/pressemitteilungen2021/pm-reviervvertrag-5107506
RR_EA7	IHK Köln	Versorgungssicherheit mit Energie muss gewährleistet sein	https://ihk-koeln.de/hauptnavigation/presse/versorgungssicherheit-5173078
RR_EA8	IHK Mittlerer Niederrhein	Strukturwandel im Rheinischen Revier schreitet voran	https://www.ihk-krefeld.de/de/oeffentlichkeitsarbeit/pressemitteilungen/2021/strukturwandel-im-rheinischen-revier-schreitet-voran.html
RR_EA9	IHK Mittlerer Niederrhein	“Heute ist ein wichtiger Tag für unsere Region”	https://www.ihk-krefeld.de/de/oeffentlichkeitsarbeit/pressemitteilungen/2021/-heute-ist-ein-wichtiger-tag-fuer-unsere-region-.html
RR_EA10	IHK Mittlerer Niederrhein	Fridays for Future und Strukturwandel	https://www.ihk-krefeld.de/de/oeffentlichkeitsarbeit/pressemitteilungen/2021/fridays-for-future-und-strukturwandel.html
RR_EA11	IHK Mittlerer Niederrhein	Abschlussbericht: Bündnis Strukturwandel gestalten	https://www.ihk-krefeld.de/de/media/pdf/abschlussbericht-strukturwandel.pdf
RR_SCO1	Zukunftsagentur Rheinisches Revier	Wirtschafts- und Strukturprogramm 1.1	https://www.rheinisches-revier.de/media/210426_wsp_1_1_webversion.pdf
RR_SCO2	Zukunftsagentur Rheinisches Revier	Reviervvertrag	https://www.rheinisches-revier.de/media/reviervvertrag_final.pdf
RR_SCO3	Zukunftsagentur Rheinisches Revier	90 Millionen Euro aus dem Sofortprogramm für das Rheinische Revier fließen nach Nordrhein-Westfalen - Laschet und Pinkwart	https://www.rheinisches-revier.de/neues/90-millionen-euro-aus-dem-sofortprogramm-fuer-das-rheinische-revier-fliesen-nach-nordrhein-westfalen-laschet-und-pinkwart-wichtiger-erster-schritt-um-wirtschaft-und-innovation-in-der-region-zu-staerken-2019-04-05/
RR_SCO4	Zukunftsagentur Rheinisches Revier	Nordrhein-Westfalen geht beim Kohleausstieg voran – Im Rheinischen Revier sollen in den nächsten Jahren dauerhaft mehr als 6.000 neue Arbeitsplätze in Zukunftsbranchen entstehen	https://www.rheinisches-revier.de/neues/nordrhein-westfalen-geht-beim-kohleausstieg-voran-im-rheinischen-revier-sollen-in-den-naechsten-jahren-dauerhaft-mehr-als-6-000-neue-arbeitsplaetze-in-zukunftsbranchen-entstehen-2021-01-05/

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Code	Name of actor	Title of document	Link
RR_SCO5	Zukunftsagentur Rheinisches Revier	Exkursion um den Tagebau Hambach: Tourismusnetzwerk informiert sich über touristisches Potenzial	https://www.rheinisches-revier.de/neues/exkursion-um-den-tagebau-hambach-tourismusnetzwerk-informiert-sich-ueber-touristisches-potenzial-2021-07-02/
RR_SCO6 RR_SCO7	Zukunftsagentur Rheinisches Revier inland	„Perspektiven schaffen“ im Kohleausstieg Ort der Zukunft – Schophoven soll Blaupause fürs Revier werden	https://www.rheinisches-revier.de/neues/perspektiven-schaffen-im-kohleausstieg-2021-06-24/ https://inland.de/aktuell/ort-der-zukunft-schophoven-soll-blaupause-fuers-revier-werden
RR_PA1	Gemeinde Merzenich	Lust auf eine gute Zukunft	https://www.gemeinde-merzenich.de/medien/bindata/Prospekt_MER_702629_12-Seiter_DIN_A4_Merzenich_01.pdf
RR_PA2	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	BMU-Förderprogramm für nachhaltigen Strukturwandel in Braunkohlegebieten gestartet	https://www.bmu.de/pressemitteilung/bmu-foerderprogramm-fuer-nachhaltigen-strukturwandel-in-braunkohlegebieten-gestartet
RR_PA3	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	Kohleausstieg: Bundesumweltministerin Svenja Schulze zufrieden mit Ergebnis der Kommission	https://www.bmu.de/meldung/kohleausstieg-bundesumweltministerin-svenja-schulze-zufrieden-mit-ergebnis-der-kommission
RR_PA4	NRW Ministry of Economy, Innovation, Digitalisation and Energy	Mit Struktur in den Wandel: Landesregierung und Region geben Startschuss für nachhaltige Strukturförderung im Rheinischen Revier	https://www.wirtschaft.nrw/pressemitteilung/mit-struktur-den-wandel-landesregierung-und-region-geben-startschuss-fuer-die
RR_PA5	NRW Ministry of Economy, Innovation, Digitalisation and Energy	Ministerreise zu Zukunftsprojekten im Rheinischen Revier – Stationen in Herzogenrath, Kerpen, Mönchengladbach und Hürth	https://www.wirtschaft.nrw/pressemitteilung/ministerreise-zu-zukunftsprojekten-im-rheinischen-revier-stationen-herzogenrath
RR_PA6	NRW Ministry of Economy, Innovation, Digitalisation and Energy	83 Zukunftsprojekte im Rheinischen Revier zur Förderung empfohlen	https://www.wirtschaft.nrw/pressemitteilung/83-zukunftsprojekte-im-rheinischen-revier-zur-foerderung-empfohlen
RR_PA7	NRW Ministry of Economy, Innovation, Digitalisation and Energy	Landeskabinett beschließt neue Leitentscheidung	https://www.wirtschaft.nrw/pressemitteilung/landeskabinett-beschliesst-neue-leitentscheidung
RR_PA8	CDU-Landtagsfraktion NRW	ROMINA PLONSKER ZU TOP 11 “STADT UND LAND - HAND IN HAND. DEN STRUKTURWANDEL IM RHEINISCHEN REVIER ERFOLGREICH GESTALTEN”	https://www.cdu-nrw-fraktion.de/artikel/romina-plonsker-zu-top-11-stadt-und-land-hand-hand-den-strukturwandel-im-rheinischen-revier
RR_PA9	CDU-Landtagsfraktion NRW	ROMINA PLONSKER ZU “RHEINISCHES REVIER HAT ALLE CHANCEN”	https://www.cdu-nrw-fraktion.de/artikel/romina-plonsker-zu-rheinisches-revier-hat-alle-chancen
RR_PA10	CDU-Landtagsfraktion NRW	THOMAS SCHNELLE MDL ZUR “UNTERRICHTUNG DER LANDESREGIERUNG ZUR LEITENTSCHEIDUNG 2021”	https://www.cdu-nrw-fraktion.de/artikel/thomas-schnelle-mdl-zur-unterrichtung-der-landesregierung-zur-leitentscheidung-2021
RR_PA11	CDU-Landtagsfraktion NRW	THOMAS SCHNELLE ZU TOP 4 “ABRISSMORATORIUM FÜR GARZWEILER-DÖRFER JETZT – DAS RHEINISCHE REVIER BRAUCHT EINE ZUKUNFTSFESTE LEITENTSCHEIDUNG!”	https://www.cdu-nrw-fraktion.de/artikel/thomas-schnelle-zu-top-4-abrissmatorium-fuer-garzweiler-doerfer-jetzt-das-rheinische-revier
RR_PA12	Grüne-Landtagsfraktion NRW	NEUBAUR: DIE LEITENTSCHEIDUNG IST HEUTE SCHON VON GESTERN	https://gruene-nrw.de/2021/03/neubaur-die-leitentscheidung-ist-heute-schon-von-gestern/
RR_PA13	Grüne-Landtagsfraktion NRW	KOHLEAUSSTIEGSGESETZ: KOHLEAUSSTIEG IN SLOW MOTION. KONZERNGESCHENKE AUS STEUERMITTELN	https://gruene-nrw.de/2020/07/35009/
RR_PA14	SPD-Landtagsfraktion NRW	AUS DER JAHRHUNDERTAUFGABE EINE JAHRHUNDERTCHANCE MACHEN: STRUKTURWANDEL IM RHEINISCHEN REVIER FÜR DIE VIELEN GESTALTEN	https://www.spd-fraktion-nrw.de/aktuelles/pressemitteilung/aus-der-jahrhundertaufgabe-eine-jahrhundertchance-machen-strukturwandel-im-rheinischen-revier-fuer-die-vielen-gestalten/
RR_PA15	Die Linke-Fraktion NRW	Klima schützen, Dörfer retten: RWE, jetzt ist Schluss!	https://www.dielinke-nrw.de/index.php?id=27864&no_cache=1&tx_news_pi1[news]=326,908&tx_news_pi1[controller]=News&tx_news_pi1[action]=detail https://www.bdew.de/presse/presseinformationen/kerstin-andreae-zum-braunkohle-ausstiegspfad/
RR_LG1	Bundesverband für Energie- & Wasserwirtschaft	Kerstin Andreae zum Braunkohle-Ausstiegspfad	https://www.bdew.de/presse/presseinformationen/kerstin-andreae-zum-braunkohle-ausstiegspfad/
RR_LG2	Industriegewerkschaft Bergbau, Chemie, Energie	“JETZT WIRD ES ZEIT, VOM ABSCHALTEN INS GESTALTEN ZU KOMMEN”	https://igbce.de/igbce/-jetzt-wird-es-zeit-vom-abschalten-ins-gestalten-zu-kommen-33326
RR_LG3	Industriegewerkschaft Bergbau, Chemie, Energie	IG BCE FORDERT ANPASSUNGSGELD FÜR KOHLEBESCHÄFTIGTE	https://igbce.de/igbce/ig-bce-fordert-anpassungsgeld-fuer-kohlebeschaeftigte-23864
RR_LG4	Ver.di	Energie- und Tarifpolitische Tagung: Strukturwandel, Klimaschutz und Digitalisierung gestalten	https://www.verdi.de/presse/pressemitteilungen/++c++98a9e00e-7a8f-11eb-a882-001a4a16012a
Ida-Viruma, Estonia (IV) IV_(L)11	Ida_virumaa climate youth	How to ensure that transition to climate friendly future would be fair for the youth? Proposals of the Ida-Viru youth Climate forum	https://media.voog.com/0000/0044/9600/files/Ida-viru-kliimakogu-ettepanekud_est.pdf

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Code	Name of actor	Title of document	Link
IV_EA1	Margus Vals, Member of the Board, Eesti Energia	Margus Vals: the green turn for the oil shale industry	https://arvamus.postimees.ee/7124366/margus-vals-polevkivitoostuse-rohepoore
IV_EA2	Ahti Asmann, head of VKG, biggest private oil shale producer	Head of VKG on EU Green Deal: new pioneer tasks should not be taken on before old ones are completed	https://www.err.ee/1037087/vkg-juht-el-i-roheleppet-uus-pioneeriulesandeid-ei-peaks-enne-vanade-taitmist-votma
IV_EA3	Estonian Chemical producers Association	Estonian Chemical producers' Association's feedback to areas supported by JT fund	https://tootusest.ee/uudis/2021/02/17/keemiatoostuse-liit-oiglase-ulemineku-raames-toetatavatest-valdkondadest/
IV_EA4	Estonian Chemical producers Association	Hallar Meybaum: A green turn for Ida-Viru County	https://leht.postimees.ee/7072586/hallar-meybaum-ida-virumaa-rohepoore
IV_EG1	Madis Vasser, Eesti Roheline Liikumine	End to oil shale energy	https://leht.postimees.ee/7029128/madis-vasser-lopp-polevkivienergiele
IV_EG2	Madis Vasser, Eesti Roheline Liikumine	Even Eesti Energia does not need the new oil refinery	https://www.err.ee/1084906/madis-vasser-uut-olitehast-ei-vaja-isegi-estonia-energia
IV_EG3	Madis Vasser, Eesti Roheline Liikumine	Just transition: view of environmental organisations	https://sisu.ut.ee/sites/default/files/planeerimiskonverents/files/2b_madis_vasser.pdf
IV_EG4	Eesti Keskkonnauhenduste koda, Estonian association for environmental organisations	The state's investments must encourage local initiatives and jsut transition	https://eko.org.ee/uudised/riigi-investeeringud-ida-virumaale-peavad-hoogustama-kohalikke-algatusi-ning-oiglast-ulemi-nekut
IV_FO1	Local government, Green movement, teghcnology sector, NGO-s	What does just transition mean for Ida-Virumaa?	https://pohjarannik.postimees.ee/7044511/mida-tahendab-ida-virumaale-oiglase-uleminek
IV_FO2	IVOL, Eve East	IVOL Eve eAST municipalities and just transition	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjH1rfX5qr4AhXcR_EDHc_jOCRm4ChAWegQIAXAB&url=https%3A%2F%2Fpolismtu.ee%2Fwp-content%2Fuploads%2F2021%2F03%2FEve-Ea-st.-IVOL-Omaavalitsused-ja-oiglase-uleminek-1.pptx&usq=AOvVaw13m6la1cdzN-fB5X-XLJZV
IV_FO3	Erik Gamzejev, Editor-in-Chief of the Põhjarannik newspaper.	Erik Gamzejev: The oil shale exit is near	https://docs.google.com/spreadsheets/d/1SjXxZ4gqvKfCySuodZm_noUsecBSB2Rg7o-mzElidAs/edit#gid=0
IV_FO4	Erik Gamzejev, Editor in Chief of Põhjarannik newspaper	ERIK Gamzejev: just transition life line should be much larger for Ida-Virumaa	https://pohjarannik.postimees.ee/7123951/erik-gamzejev-oiglase-ulemineku-paasterongas-peaks-olema-ida-virumaa-ja-ks-marksa-suurema-labimooduga
IV_LG1	Taavi AAs, Minister, Centre Party, Sander Vaikma Energy trade Union	Aas: Up to 1000 energy workers could be out of work in Ida-Viru County	https://www.err.ee/948695/aas-ida-virumaal-voib-toota-jaada-kuni-1000-energeetikut
IV_LG2	Trade Unions, Chemical Industry Association, local municipalities	Appeal: 90 % of the money from the Fair Transition Fund must go to business in Ida-Viru County.	https://keemia.ee/et/artiklid/poordumine-90-oiglase-ulemineku-fondi-rahast-peab-minema-ida-virumaa-ettevotusele
IV_PA1	Minister of State Administration, Centre Party	A steering group has started work to accelerate the development of Ida-Virumaa and draw up a just transition plan.	https://kesknadal.ee/2020/06/29/ida-virumaa-arengu-kiirendamiseks-ja-oiglase-ulemineku-kava-koostamiseks-alustas-tood-juhuuhm/
IV_PA2	Government	Territorial programme of just transition	https://pilv.rtk.ee/s/5788r2g7M2XA4TZ
IV_PA3	Just Transition office, Ministry of Finance	Proposals of the Ida-Viru climate youth are taken into account in the just transition process	https://www.fin.ee/uudised/oiglase-ulemineku-protsessis-arvestatakse-ida-viru-kliimanoorde-ettepanekute
IV_PA4	Dimitri Dimitrijev, head of just transition steering committee, Centre Party	Dimitri Dimitrijev: Just transition: a problem or solution for Ida-Virumaa?	https://pohjarannik.postimees.ee/7086025/dimitri-dimitrijev-kas-oiglase-uleminek-on-ida-virumaa-jaoks-probleem-voi-lahe-ndus
IV_PA5	Ministry of Finance, Just transition office	Ivan Sergejev: Ida-Viru people start to understand that just transition is not closure but an opportunity	https://maaleht.delfi.ee/artikkel/92707807/ivan-sergejev-ida-virulased-hakkavad-tajuma-et-rohepoore-ei-ole-millegi-ki-nnipanek-vaid-ulatusliku-uenemise-voimalus
IV_PA6	Ministry of Finance, just transition office	The state calls for good ideas for the development of Ida-Virumaa!	https://www.rahandusministeerium.ee/et/uudised/riik-kutsub-ules-ida-virumaa-arenguks-haid-ideid-valja-pakkuma
IV_PA7	Coalition parties (Reform, centre,)	Coalition agreement for 2021–2023	https://www.valitsus.ee/valitsuse-eesmargid-ja-tegevused/valitsemise-alused/koalitsioonilepe
IV_PA8	Centre party, EKRE	Political parties published their views on oil shale and the gas pipeline	https://www.aripaev.ee/uudised/2019/03/20/erakonnad-avaldasid-seisukohad-polevkivi-ja-balticconnectorikohta
IV_PA9	Prime Minister Kaja Kallas (reform party)	PM Kaja Kallas: Green Turn will help to raise the well-being of Ida viru inhabitants	https://www.valitsus.ee/uudised/peaminister-kaja-kallas-rohepoore-aitab-tosta-idavirulaste-heaolu
IV_PA10	Prime Minister Kaja Kallas (reform party)	Kaja Kallas: Green deal is not a threat but opportunity for Ida-Virumaa	https://pohjarannik.postimees.ee/7178249/kaja-kallas-rohelepe-pole-ida-virumaa-jaoks-oh-t-vaid-voimalus
IV_PA11	Eriki Savisaar (Centre Party)	Eriki Savisaar: the green turn won't leave people unemployed	https://kesknadal.ee/2021/02/14/erki-savisaar-rohepoore-ei-jata-inimesi-tootuks/
IV_PA12	Jaak Aan, Minsiter for state administration, Centre Party	Aab: transition brings change and opportunities for fast development	http://narva-joesuu.ee/uudised-ja-teated/-/asset_publisher/HXa53766CuGO/content/aa-ida-viru-uleminek-toob-muutusi-ja-loob-voimalused-kiireks-arenguks?redirect=http%3A%2F%2Fnarva-joesuu.ee%2Fuudised-ja-teated%3Fp_p_id%3D101_INSTANCE_HXa53766CuGO%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-1%26p_p_col_count%3D1%26p_r_p_564233524_resetCur%3Dfalse
IV_PA13	Jüri Ratas (speaker of Parilament, Centre party)	Ratas: green turn should benefit the people	https://pealinn.ee/2021/05/26/ratas-rohepoore-peab-tootama-inimeste-heads/

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IV_PA14	Martin Helme, minister of Finance (EKRE)	Martin Helme: for Estonia to prosper, Eesti Energia must be successful!	https://www.rahandusministeerium.ee/et/uudised/martin-helme-et-estil-laheks-hasti-peab-est-energia-olema-edukas
IV_PA15	IVOL,	Main directions in just transition in Ida-Virumaa	https://ivol.ee/documents/9867329/27201460/OYK+eelnou+seisuga+15+01+2021.pdf/ecd9e479-b30a-4710-9001-84c17926a0ea
IV_PA16	IVOL, Hardi Murula, coordinator of just transition platform	Ida-Viru just transtion platform's 2nd meeting	https://ivol.ee/documents/9867329/29476665/Platvomi+II+kokkusaamise+kokkuvote+taiendustega.pdf/8c4ec924-6660-4ee1-abf6-df3df8e4b363
IV_PA17	Hardi Murula, Development Manager of the Ida-Viru County Union of Local Governments	Oil shale industry will remain in Ida-Viru County	https://toostusest.ee/uudis/2021/11/09/polevkivil-pohinev-toostus-jaab-ida-virumaale-alles/
IV_PA18	Eve East, Chairperson of the Board of the Union of Local Governments of Ida-Virumaa	Public appeal of the Union of Local Governments of Ida-Viru County. A green turnaround in Ida-Virumaa	https://www.err.ee/1608093913/ida-virumaa-omavalitsuste-liidu-avalik-poordumine-rohepoore-ida-virumaal
IV_PA19	Katri Raik, mayor of Narva, social democrats	Let's spend a billion euros to polish Ida-Viru County as one of Estonia's diamonds. But oil shale is not the solution!	https://epl.delfi.ee/artikkel/90471591/katri-raik-kulutagem-miljard-eurot-ida-virumaa-kui-est-uh-teenanti-lihvimiseks-polevkivi-ei-ole-aga-siin-lahendus
IV_PA20	Keit Pentus-Rosimannus, Reform party	Keit Pentus-Rosimannus: Ida-Virumaa should not be pushed into the trap of oil shale mines	https://pohjarannik.postimees.ee/6882287/keit-pentus-rosimannus-ida-virumaad-ei-tohi-suruda-polevkivikaevanduss-e-loksu
IV_PA21	Lauri Läänemets, Social Democrats	Lauri Läänemets: will the green turn wear down Estonia's rural areas?	https://www.err.ee/1608487379/lauri-laanemets-kas-rohepoore-annab-est-maapiirkondadele-kabelimatsu
IV_PA22	Riho Terras (MEP), Isamaa Party	Riho Terras: the green turn must not be led by fanatics, otherwise we'll be stuck, like Germany, on Russian gas	https://epl.delfi.ee/artikkel/92489415/riho-terras-rohepooret-ei-tohi-lasta-juhtida-fanaatikutel-muidu-jaame-rippuma-sa-ksamaa-kombel-vene-gaasi-otsa
IV_PA23	Rene Kokk, EKRE	Rene Kokk: The European Union is in an energy deficit - shale oil is our trump card	https://epl.delfi.ee/artikkel/93602991/paeva-teema-rene-kokk-euroopa-liit-on-energiadefitsiidis-polevkivioli-on-meie-trump
IV_PA24	Editorial, no author	A green turn is demolishing Ida-Virumaa and only the EKRE stands for the people there	https://uueduudised.ee/uudis/est/rohepoore-lammutab-ida-virumaad-ja-ainult-ekre-seisab-sealse-rahva-est/
IV_PA25	Riho Breivel, EKRE, former head of Ida-Viru region	Riho Breivel on Ida-Viru County's oil shale resource: don't spit in the old well before the new one is ready	https://uueduudised.ee/majandus/riho-breivel-ida-virumaa-polekiviressursist-ara-sulita-vanasse-kaevu-enne-kui-uus-va-lmis-on/
IV_PA26	Centre party, MEP Yana Toom	For hundreds of millions of Euros of EL money, jobs should be created only in North East Estonia	https://yanatoom.ee/diary.php?lang=ee&id=8979
IV_PA27	Centre party/Government	Government supported creating the Just Transition Mechanism	https://www.valitsus.ee/uudised/valitsus-toetas-el-i-oiglase-ulemineku-mehhanismi-loomist-0
IV_RO1	Praxis, Think Tank	Analysis of Ida-Virumaa's just transition	https://www.praxis.ee/wp-content/uploads/2019/12/Ida-Virumaa-%C3%B5iglase-%C3%BCleminiku-v%C3%B5imaluste-ana%C3%BC%C3%BCs-Praxis.pdf
IV_RO2	RAK, Centre for applied anthropology	Perspectives of Ida-Viru youth: just transition and green turn	http://media.voog.com/0000/0036/5677/files/Ida-Viru%20noorte%20perspektiivid_eeistikeelne%20raport%20(Rohetiiger%26RAKE_2021).pdf
IV_RO3	Margit Keller, head of research project "Deep transitions" at Tartu University	Just transition offers a historical opportunity to connect the social with technological in Ida-Virumaa	https://leht.postimees.ee/7100679/regionaalareng-oiglase-uleminek-pakub-ajaloolist-voimalust-siduda-ida-virumaa-kokku-sotsiaalne-tehnoloogilisega
IV_RO4	Estonia Club of Rome	The Future of Energy and Mineral Resources in Estonia	https://roomaklubi.com/2020/11/30/maapoueresuss-ettepanekud/
Silesia, Poland (SI)			
SL_(L)I1	Związek Gmin i Powiatów Subregionu Zachodniego Województwa Śląskiego	Position on implementation of the Just Transition Fund	https://subregion.pl/stanowisko-w-sprawie-wdrozenia-funduszu-sprawiedliwej-transformacji/
SL_(L)I2	Śląski Związek Gmin i Powiatów, SGGP, GIPH	Common Position on establishment of the Silesian round table on energy	https://www.silesia.org.pl/aktualnosci/wspolne-stanowisko-w-sprawie-przyszlosci-gornictwa_887
SL_(L)I3	Wojewódzka Rada Dialogu Społecznego	Position of the Voivodship Council for Social Dialog on the implementation of the Just Transition Fund	https://dialog.slaskie.pl/download/content/455
SL_(L)I4	22 NGOs +3 local governments	Open letter to the Marshall of Silesian Region	http://bomiasto.pl/wp-content/uploads/2021/06/stanowisko_NGOsow.pdf
SL_(L)I5	Śląski Ruch Klimatyczny	Manifesto	http://www.slaskiruchklimatyczny.pl/wp-content/uploads/2021/05/Manifest-Slaskiego-Ruchu-Klimatycznego.pdf
SL_(L)I6	BoMiasto	A coal-free slasher, or the just transformation of Upper Silesia	https://zielonewiadomosci.pl/tematy/obywatele/slaskie-bez-wegla-czyli-o-sprawiedliwej-transformacji-gornego-slaska/
SL_EA1	PGG	The Support Programme will stabilise the mining sector and the energy market	https://nett.pl/modules/newspaper/pdf-flip/pdf-view.php?id=794
SL_EA2	Zarząd Spółki Brzezinka	Coal mine for Kowalski	https://www.pb.pl/kopalnia-wegla-dla-kowalskiego-1,107,210?fbclid=IwAR2SxixwV-akYrY00OIZs03L6aTZf51-0SyPNcoowqX2oZu-yiHLtVrQoAQa

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Code	Name of actor	Title of document	Link
SL_PA6	Prime Minister/government	Interview with Mateusz Morawiecki, Prime Minister - Mine closures is a disaster for the economy	https://nettg.pl/modules/newspaper/pdf-flip/pdf-view.php?id=675
SL_PA7	Wojewoda Śląski	Provincial governor's answer on the Paruszowiec mine	https://rybnik.naszemiasto.pl/wojewoda-nie-decyduje-o-tym-czy-kopalnia-na-danym-terenie/ar/c3-7733411?fbclid=IwAR1eXzdpXp-oslyRl3o3i0X-3c5VWfr5PucOWuLlwfl19hYNwLEwhkD-VrU
SL_PA8	Nowa Lewica	Letter to the Silesian Voivode on the recognition of the City Council's resolution to stop the construction of the Paruszowiec mine	https://www.facebook.com/1465965073732774/photos/a.1484982701831011/2650246018638001
SL_PA9	Solidarna Polska	Interview with Janusz Kowalski (Solidarna Polska) _Some call me the last defender of coal	https://www.wnp.pl/gornictwo/janusz-kowalski-szczerze-do-bolu-czesc-nazywa-mnie-ostatnim-obronca-wegla,445929.html?fbclid=IwAR0VBpoYTm5ZvSZYBDQ00b9rqlvAqaP_BbQ-f3vwm4mSAqecF_jydDUINE
SL_PA10	Christopher Todd, Dyrektor Wydziału ds. Polski w DG Regio (Dyrekcja Generalna ds. Polityki Regionalnej Komisji Europejskiej)	Upper Silesia will be one of the biggest beneficiaries of EU funds	https://www.facebook.com/slaskilad/posts/pfbid029NiLqwszf6TEX3DwcY4Q2HCSayPPDbLMZuf7YzLfsWGIT7vVha48euu96SWeZxyhl
SL_PA11	EKR	Belief in a green revolution cannot replace a logical and cool analysis of the facts	https://www.facebook.com/slaskilad/posts/pfbid0numCBfn7vWVeGrDFWQEHb4SdnvRjYbcR9dhkCJo4LM6r8Vxd6A7Rr5wW5KjfaPl
SL_PA12	Prawo i Sprawiedliwość (Adam Gawęda)	Clean coal technologies can play an important role	http://izabelakloc.pl/wp-content/uploads/2021/01/Slaski-Lad-internet.pdf
SL_PA13	Platforma Obywatelska (Śląskie)	Support for the convening of a Round Table on Just Transition	https://www.facebook.com/permalink.php?story_fbid=pfbid0hiBPDaxhymWKb5KUzmaA3uZPe6TLfHVcN81fHF4yrwpUnoLJeA3tnrE9DnDTccl&id=128,055,717,206,955
SL_PA14	UM Bytom	Silesian Round Table on Mining and Energy Transition	https://www.bytom.pl/aktualnosci/index/Slaski-Okragly-Stol-w-sprawie-transformacji-gorniczej-i-energetycznej/idn:34543
SL_RO1	Instytut Badań strukturalnych	The coal phase out and the labour market transition pathways. The case of Poland	https://ibs.org.pl/app/uploads/2021/06/The-coal-phase-out-and-the-labour-market-transition-pathways-the-case-of-Poland.pdf
SL_RO2	GIG	Silesia will be changing	https://nettg.pl/modules/newspaper/pdf-flip/pdf-view.php?id=729
SL_RO3	Uniwersytet Śląski w Katowicach	Open letter from the scientific community of the University of Silesia in Katowice to the Prime Minister of Polish Government, Mateusz Morawiecki	http://forumakademickie.pl/wp-content/uploads/2020/11/List_otwarty_do_Premiera.pdf
SL_SCO1	Spoleczna Koalicja “Zielona Transformacja Śląska”	Silesia residents build coalition for green transformation of the region	https://publicystyka.ngo.pl/mieszkanicy-slaska-buduja-koalicje-na-rzecz-zielonej-transformacji-regionu
WM_EA1	Western Macedonia, Greece (WM) Public Power Cooperation SA (PPC SA)	PPC: No change in the design of the delignification process	https://www.fortunegreece.com/article/dei-den-allazi-o-schediasmos-tis-apolignitopiisis/
WM_EA2	Public Power Cooperation SA (PPC SA)	Soil restoration Western Macedonia	https://www.dei.gr/el/dei-omilos/perivallon/prostasia-perivallontos/viopoikilotita-edafi/
WM_EA3	Public Power Cooperation SA (PPC SA)	PPC - Motor Oil: the first projects of the agreement between the two groups - Where and how the green hydrogen will be produced	https://energypress.gr/news/dei-motor-oil-ta-prota-projects-tis-symfonias-ton-dyo-omilon-poy-kai-pos-tha-paragetai-prasino
WM_EA4	“GREECE 2028”- Observatory on delignification	Delignification: What the government promised - What happened	https://greece2028.gr/%ce%b1%cf%80%ce%b%ce%bb%ce%b9%ce%b3%ce%bd%ce%b9%cf%84%ce%b%cf%80%ce%b%ce%af%ce%b7%cf%83%ce%b7-%cf%84%ce%b9-%cf%85%cf%80%ce%b%cf%83%cf%87%ce%ad%ce%b8%ce%b7%ce%ba%ce%b5-%ce%b7-%ce%ba%cf%85%ce%b2/
WM_EA5	GREECE 2028”- Observatory on delignification	Comment on the 12 immediate action measures for Western Macedonia	https://greece2028.gr/%ce%b4%ce%b5%ce%bb%cf%84%ce%af%ce%b%cf%84%cf%8d%cf%80%ce%b%cf%85-%cf%83%cf%87%cf%8c%ce%bb%ce%b9%ce%b%cf%83%cf%84%ce%b1-12-%ce%bc%ce%ad%cf%84%cf%81%ce%b1-%ce%ac%ce%bc%ce%b5%cf%83%ce%b7%cf%82/
WM_EA6	GREECE 2028”- Observatory on delignification	Our proposals to the government	https://greece2028.gr/%ce%b%cf%80%cf.%81%ce%b%cf.%84%ce%ac%cf.%83%ce%b5%ce%b9%cf.%82-%ce%bc%ce%b1%cf.%82-%cf.%83%cf.%84%ce%b7%ce%bd-%ce%ba%cf.%85%ce%b2%ce%ad%cf.%81%ce%bd%ce%b7%cf.%83%ce%b7/
WM_EA7	Kozani Chamber of Commerce and Industry	“Western Macedonia is changing”	https://e-ptolemeos.gr/i-dytiki-makedonia-allazei-to-foroum-tou-eve-kozanis-gia-tin-apolignitopiisi/
WM_EA8	Florina Chamber of Commerce and Industry	Supporting local entrepreneurship in the P.E. of Florina during the transition to the post-lignite era	https://www.florinapress.gr/politismos/%CE%BF%CE%BB%CE%BF%CE%BA%CE%BB%CE%B7%CF%81%CF%8E%CE%B8%CE%B7%CE%BA%CE%B5-%CE%BC%CE%B5-%CE%B5%CF%80%CE%B9%CF%84%CF%85%CF%87%CE%AF%CE%B1-%CE%B7%CE%B7%CE%BC%CE%B5%CF%81%CE%AF%CE%B4%CE%B1-%CF%84/
WM_EG1	Ecological Movement of Kozani	Delignification is not dealt with by “cannibalizing” lignite - We must put the emphasis on post-lignite planning	https://xronos-kozanis.gr/oikologiki-kinisi-kozanis-i-apolignitopiisi-den-antimetopizetai-me-diasolinosi-toy-ligniti-na-rixiyme-to-varos-sto-metalnigitiko-schediasmo/
WM_EG2	Eordia SOS	It is our duty to defend our lives and our dignity	https://kozani.tv/index.php/96370-%CE%BF%CE%BC%CE%AC%CE%B4%CE%B1-%CE%B5%CE%BF%CF%81%CE%B4%CE%B1%CE%B9%CE%B1-sos-%CE%B5%CE%AF%CE%BD%CE%B1%CE%B9-%CF%85%CF%80%CE%BF%CF%87%CF%81%CE%AD%CF%89%CF%83%CE%B7-%CE%BC%CE%B1%CF%82-%CE%BD%CE%B1-%CF%85%CF%80%CE%B5%CF%

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WM_EG3	WWF-Hellas	A just transition to the post-glacial era: WWF's proposals to avoid job losses	
WM_FO1	Just Transition Institute Greece/WM – JTIG	Scientists of Western Macedonia as a catalyst for transition.	https://jtig.org/%ce%bf%ce%b9-%ce%b5%cf%80%ce%b9%cf%83%cf%84%ce%ae%ce%bc%ce%bf%ce%bd%ce%b5%cf%82-%cf%84%ce%b7%cf%82-%ce%b4%cf%85%cf%84%ce%b9%ce%ba%ce%ae%cf%82-%ce%bc%ce%b1%ce%ba%ce%b5%ce%b4%ce%bf%ce%bd%ce%af%ce%b1/
WM_FO2	Network of Energy Communities	A network of energy communities to meet citizens' energy needs - Citizen and renewable energy communities are coming	https://www.prlogos.gr/%CE%BF%CF%86%CE%BB%CE%BF%CF%83-%CE%AD%CE%BD%CE%B1-%CE%B4%CE%AF%CE%BA%CF%84%CF%85%CE%BF-%CE%B5%CE%BD%CE%B5%CF%81%CE%B3%CE%B5%CE%B9%CE%B1%CE%BA%CF%8E%CE%BD-%CE%BA%CE%BF%CE%B9%CE%BD%CE%BF%CF%84%CE%AE/
WM_FO3	The Green Tank	What do the citizens of the lignite regions think about de-lignification and the transition to the post-lignite era?	https://thegreentank.gr/2020/11/27/analysis_poll_lignite_regions_el/
WM_FO4	The Green Tank	Review of developments: energy communities in the lignite regions of Greece	https://thegreentank.gr/2021/11/22/brief_encom_el/
WM_FO5	The Green Tank	The Governance of the Just Transition	https://thegreentank.gr/2021/07/19/dikaii-metavasi-diaklyversnisi-ekthesi/
WM_LG1	GENOP-DEH, 2nd tier union of 27 member unions nationally, of which 6 from Western Macedonia	GENOP-DEH: “No de-lignification by 2023”	https://ecopress.gr/genop-dei-den-vgeni-apolignitopii/
WM_LG2	Spartakos Labor union in lignite mining	The end of lignite threatens Western Macedonia with desertification	https://gr.euronews.com/2020/03/06/ellada-to-telos-tou-ligniti-apeilei-me-erimwsi-ti-dytiki-makedonia
WM_PA1	Network of Energy Production Municipalities	To enable local communities to get a piece of the energy produced from renewable energy sources.”	http://www.ded.gr/anakoinwseis/v-giannakis-proedros-diktyoy-energeiakon-dimon-quot-na-mporesoy-n-oi-topikes-koinoni-es-na-paroy-n-ena-kommati-tis-paragomenis-energeias-ape-ape-quot/
WM_PA2	Network of Energy Production Municipalities	Letter from the energy mayors to the plenary of the European Parliament: “Consider what is really fair”	http://www.ded.gr/anakoinwseis/epistoli-ton-energeiakon-dimarchon-pros-tin-olomeleia-toy-eyropaikoy-koinovoylioy-ana-logisteite-ti-einai-pragmatika-dikaio/
WM_PA3	Network of Energy Production Municipalities	The issues raised by the Network of Energy Municipalities to the Minister of Energy	http://www.ded.gr/anakoinwseis/v-giannakis-ta-zitimata-poy-etthese-epi-tapitos-to-diktyo-energeiakon-dimon-ston-ypen-k-skreka/
WM_PA4	Ministry of Development & Investment	Western Macedonia-Megalopolis: Transition to the post-lignite era and new business opportunities	https://www.sdam.gr/node/230
WM_PA5	Regional Authority of Western Macedonia	The proposals of the Regional Authority of Western Macedonia on the bill for fumigation	https://energypress.gr/news/oi-protaseis-tis-perifereiakis-arhis-d-makedonias-sto-nomoshedio-gia-tin-apolignitopoiisi
WM_PA6	Municipality of Eordaia	The Consequences of Delignification	<u>Ομιλία Δημάρχου Εορδαίας στο πλαίσιο της ειδικής συνεδρίασης του Δ.Σ. της ΚΕΔΕ με μοναδικό θέμα “Η απολιγνιτοποίηση και οι συνέπειές της” που έλαβε χώρα την 1η Απριλίου 2022 στην Πτολεμαίδα – Δήμος Εορδαίας (ptolemaida.gr)</u> <u>Δήμαρχος Αμυνταίου: Μουδρόμος η στροφή στον πρωτογενή τομέα GRTimes.gr</u> <u>Η τοποθέτηση του Δημάρχου Φλώρινας Βασιλή Γιαννάκη στη σύσκεψη με τον Πρωθυπουργό για την απολιγνιτοποίηση Kozani Media</u>
WM_PA7	Municipality of Amyntaio	The shift to the primary sector is a one-way street	
WM_PA8	Municipality of Florina	The position of the Mayor of Florina Vassilis Giannakis at the meeting with the Prime Minister on fossilization	
WM_PA9	WM parliamentary party/ND	Speech by Prime Minister Kyriakos Mitsotakis at the inauguration of the photovoltaic park in Kozani	https://primeminister.gr/2022/04/06/29056
WM_PA10	WM parliamentary party/SYRIZA	The proposal for de-lignification announced by Alexis Tsipras from Kozani - “The government has led to the sudden death of lignite plants”	https://www.vetoneews.gr/politiki/item/59437-oi-epta-axones-ths-protashs-gia-thn-apolignitopoiish-poy-anakoinwse-o-alex-tsipras-ape-thn-kozanh-h-kybernhsh-odhghse-se-xafniko-thanato-tis-lignitikes-monades
WM_PA11	WM parliamentary party/KINAL-PASOK	Yes to fumigation - no to government improvisations	https://www.drt915.gr/kinal-ne-stin-apolignitopiisi-ochi-stous-kivernitikous-aftoschediasmous/
WM_PA12	WM parliamentary party/KKE	“Delignification” will bring poverty and unemployment to lignite areas	https://vetoneews.gr/energia/item/56787-kke-h-%C2%ABapolignitopoiish%C2%BB-tha-ferai-ftwcheia-kai-anageria-stis-lignitikes-perioches
WM_PA13	WM parliamentary party/ELLINIKI LISI	The violent and unplanned de-lignification of the country is a crime	https://ikarianews.gr/archives/120630

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WM_PA14 WM_PA15	WM parliamentary part/MERA 25 Union of Municipalities of Western Macedonia	The future that will replace lignite is hydrogen Post-Lignite Era and Just Transition in Western Macedonia	https://www.voria.gr/article/varoufakis-apo-ptolemada-to-mellon-pou-tha-antikatastasi-ton-ligniti-ine-to-idrogono https://www.peddmm.gov.gr/index.php/paremvasi-toy-proedroy-tis-ped-dytiki/
WM_RO1	University of Western Macedonia	The role of the University of Western Macedonia (UWM) as an accelerator in the just development transition of Western Macedonia	https://www.uowm.gr/epikairota/deltia-typou/o-prytanis-toy-paneplstimioy-dytikis-makedonias-sto-7o-oikonomiko-fo-roy-m-ton-delfon-to-paneplstimio-se-rolo-epitachynti-sti-dikai-anaptyxiaki-metavasi-tis-periferias-dytikis-makedonias/
WM_RO2 WM_SCO1	University of Western Macedonia Transition SA	Students take the lead in the debate on fossilization The Board of Directors of the company "METAVASIS S.A.	https://xronos-kozanis.gr/oi-mathites-protagonistoy-sti-syzitisi-gia-tin-apolignitopoiisi/ https://www.mindev.gov.gr/%CF%83%CF%85%CE%B3%CF%81%CE%B1%CF%84%CE%B8%CE%B7%CE%BA%CE%B5-%CF%83%CF%83%CF%8E%CE%BC%CE%B1-%CF%84%CE%BF-%CE%B4%CE%B9%CE%B4%CE%B9%CE%B7%CF%84%CE%B8%CE%B9%CF%8C-%CF%83%CF%85/
WM_SCO2	AL stakeholders	Delignification: What the stakeholders of western Macedonia asked the Prime Minister	https://www.imerisia.gr/politiki/28505-apolignitopoiisi-ti-zitisan-oi-forais-tis-dytikis-makedonias-apo-ton-prothypoyngo

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