



Evidence-based recommendation as to the most Negatively Affected Territory to be supported by the Just Transition Territorial Plan.

Background to the project and our task:

In November 2021, the Department of the Environment, Climate and Communications (DECC) issued a request for tenders (RfT) for the compilation of a regional statistical analysis and profile of the territory to be covered by the Territorial Just Transition Plan (TJTP). People & Place has been commissioned to compile this analysis and profile, over two stages as follows:

- i. To undertake an analysis and an outcome regarding the territory that has been most negatively affected by the transition away from peat harvesting and its ancillary industries. The consultant is to explore the impact on the surrounding (parts of) counties included in the current national JT policy approach (i.e. North Tipperary, East Galway and (West) Kildare) to determine the level of impact and if a sufficiently robust justification can be made for their inclusion in the territorial plan. This analysis may recommend the inclusion of territories at a sub-county level if there is a sufficiently strong justification.
- ii. To compile a statistical profile of the agreed territory, based on contiguous counties and MDs, to be covered by the JTTP, and to identify signposts in respect of the spatial and sectoral investments required.

The first of these two stages, which is presented here, builds on and adds value to the comprehensive research undertaken by EnvEcon (see SRSP research reports below). The EnvEcon research presents macro-level data, at regional and county levels, and it effectively establishes the context in which the JTTP is being rolled-out. Moreover, EnvEcon establishes a useful and objective set of indicators that People & Place have expanded and operationalised at a more micro spatial level, thereby enabling informed decision making in respect of county and sub-county territorial inclusion in the delineation of the most negatively affected territory.

Recognition of the Irish Context for the EU Territorial Just Transition Plan

Previously, the European Commission DG Reform had commissioned a series of reports and consultation documents via the Structural Reform Support Programme (SRSP) to provide support to the preparation of Territorial Just Transition Plans in Ireland. As part of this preparatory work, the *D3. Report on the Transition Process Toward Climate Neutrality* sets out a territorial analytical methodology to allow an appraisal of the 'most affected' territories.

The main finding of the report is that County Offaly should be recognised as the most heavily impacted county in the context of the EU JTF relevant transition, followed by the other Midlands NUTS 3 counties (Longford, Laois, Westmeath) and County Roscommon.

While the results of the *D3. Report on the Transition Process Toward Climate Neutrality* report have identified the ‘most affected’ territory as the Midlands NUTS 3 and Roscommon, the DECC has requested an additional evidence-based analysis to review this approach and to explore the impact on the surrounding (parts of) counties included in the current national JT policy approach i.e. North Tipperary, East Galway and (West) Kildare to determine the level of impact and if a sufficiently robust justification can be made for their inclusion in the territorial plan. For example, this may assess the impacts of events which occurred in particular Municipal Districts, communities, parishes and explore the cross-county dimension of where impacted employees live and work e.g. closure of Littleton Briquette Factory in North Tipperary and resulting job losses.

The indicators and evidence base used for this analysis must comply with the intervention logic set out in the EU JTF Regulation in terms of evidencing the link between the transition away from peat as a power source and the direct/indirect impact on the region. The analysis will add additional insights into the recently prepared reports, and it will assist the DECC in ensuring an inclusive and evidence-based approach to the delineation of the most negatively affected territory. Thus, People & Place are required to draw on the research undertaken to date and to enhance it by providing additional, complementary, objective, robust and fine-grained micro-geographical data and analysis, in order to give due consideration to the possible inclusion of sub-county units from the counties that adjoin the identified the ‘most affected’ territory (Midland Region and Roscommon) – Kildare, Galway and Tipperary only.

The need for sub-county analysis is accentuated in the Irish context, given the relatively large size (relative to other EU member states) of local government units¹ and the importance of ensuring that Ireland is not disadvantaged by the rigidities associated with a county-based approach to the delineation of the relevant geography. A special edition of the Institute of Public Administration’s journal entitled ‘*Administration*’ (vol. 67, no. 3) presented a series of articles that demonstrated the merits of going beyond the county as the unit on which economic and spatial planning and development are based – given the regional importance of city-regions, inter- and intra-regional dynamics and the relevance of functional areas and approaches, rather than those that are delimited by administrative boundaries, which, in the case of Irish counties, were mostly drawn between the fourteenth and sixteenth centuries. In this context, the analysis should be at the most refined geographical analysis as possible, and it should explore and source relevant data at a sub-

¹ The Institute for Public Administration points out that “The average size of county and city councils is considerably larger than all other developed countries in the world, with the exception of Britain” (Callanan, 2011: i). As noted by de Vries and Sobis (2013), larger local governments tend to mean less tailoring of services, less flexibility, more bureaucracy and less knowledge of local circumstances.

national level i.e. NUTS 3, county level, sub-county level (e.g. Municipal District, Electoral Division, Small Area). As noted in research published by the Institute of Public Administration, Ireland's municipal districts are closer to the Organisation for Economic Cooperation and Development (OECD) averages in respect of population (demographics) and surface area (size) than are our county or city councils (Boyle, 2016). Thus, while country-specific and administrative criteria are important, this exercise requires applying lessons from best international practices, as these point to the importance of local-level variables and patterns. Furthermore, this analysis needs to be mindful of social and economic geographies, and it ought, therefore, to pay due attention to the location of peat harvesting and production facilities and their downstream activities, including the linkages between, and the implications of, the closure of the two power stations (West Offaly and Lough Ree) and associated direct/indirect impacts across the most impacted territory. Thus, the geographical analysis needs to give due weighting to both the locations of places of work (and former work) and places of residence (including those of displaced workers) – directly in peat-based activities and those that have been associated with their spin-offs (downstream and backwash effects).

Our Approach:

Our methodology, for this profiling and analysis, is rooted in an objective and transparent harvesting, visualisation, presentation and interrogation of the data, based on robust indicators that can be subjected to longitudinal and spatial analysis. This involves identifying relevant indicators (as used in *D3. Report on the Transition Process Toward Climate Neutrality* report) that are directly related to the just transition and for which quantitative and qualitative data can be openly identified, extracted and rigorously interrogated at county and sub-county levels. This approach, which utilises Central Statistics Office (CSO) and other official databases, offers advantages over survey-based methodologies that may be subject to time delays and variations in stakeholder engagement capacities.

The qualitative analysis concentrated on an initial in-depth review of all relevant documentation and reports (*Midlands Regional Profile - START*, *Commission Staff Working Document* and *Deliverable 3: Report on the Transition Process Toward Climate Neutrality*). This review provided the project team with a valid and reliable presentation of the most relevant and agreed indicators (as per D3 report) for developing a measurement and objective delineation of the 'most affected' territories. Thus, in line with the imperative for compliance with an intervention logic that is based on the transition away from peat (and ancillary activities), People & Place has operationalised (as presented in Table 1) a set of indicators, for which sub-county data have been analysed. The most suitable indicators, as per guidance from the Commission Staff Working Document, are linked to four key strands – social impact, economic impact, demographic impact and environmental impact.

As the focus of this specific analytical approach is on the impact on the surrounding counties (Galway, Tipperary and Kildare) included in the current national JT support framework (used for the purposes of the national Just Transition Fund and which also influenced the Midlands Retrofit Scheme and the Enhanced Decommissioning, Rehabilitation and Rewetting Scheme), it was necessary to review all indicators, articulated in the D3 report, as to their applicability in respect of a sub-county analysis. In spatial terms, sub-county units need to be of sufficient critical mass as to take due account of the direct linkages between peat-based activities across clusters of communities, while also enabling effective stakeholder alliances in the delivery of JT strategic actions, thereby ensuring that all actors in the delineated geographies are effectively enabled to come together and to pool their knowledge, expertise and resources – including human capital and financial leverage. Thus, the delineation of the selected territory needs to be mindful of the need for JT actions to feed into place-making and wider territorial renewal and resilience. Thus, the Municipal District (MD) represents the most appropriate geographical tier at which to pursue the requisite analysis.

The appropriateness of the MD is accentuated in the counties that are in consideration here, as Tipperary is Ireland's largest inland county and Galway is Ireland's second largest county. Both Tipperary and Galway are internally very diverse, and they contain MDs that have had little or no relationship with Midlands-based peat-related activities, while also having MDs that are intrinsically embedded therein. While County Kildare is smaller in scale (than Galway and Tipperary), it exhibits considerable internal diversity; some parts of the county are integrated in the socio-economic systems of the Greater Dublin Area, while other parts are laggard in economic terms and have a more rural character.

Mindful of both the current statistical imperatives (to inform territorial delineation) and the anticipated strategic interventions, including those promoted by local authorities, People & Place has compiled and appropriately weighted the relevant data at MD level. Municipal districts are, in terms of physical and demographic size, more typical of European local government units than are counties. Cognisant of their usefulness as territorial planning units, Irish local authorities have prepared and are preparing MD plans, and MDs have become the units for the elaboration of local area plans. Indeed, since the coming into force of the 2014 Local Government (Reform) Act, they are the geographical basis on which councillors are elected and through which they represent their electors. It is, therefore, strategically important that the delineation and profile of the selected territory be aligned with current practices and the future trajectory of spatial planning. As flagged earlier, municipal districts are closer in scale (geographically) and size (number of residents) to the OECD average local government unit than are Irish counties. Across the OECD the average number of inhabitants per municipality (lowest tier of government) ranges from 1,680 in the Czech Republic to over 220,000 in South Korea. Ireland's city and county councils have the third-highest average populations (after South Korea and the UK). The figure for Ireland is 147,741, while the OECD average is 9,115. The corresponding figure for Ireland's municipal districts is 36,349, which is much closer to the OECD average and is similar to that which pertains in the Netherlands, Australia, Greece, Portugal and Sweden. In terms of

their surface area (square kilometres), the average Irish city and county council is the fourth-largest in the OECD (with an average surface area of 2,236km²), after Australia, New Zealand and Canada and similar to Chile. The average size of an Irish municipal district (558 km²) is closer to the OECD average local authority size of 266km².

Ireland has thirty-one local authority areas, of which only four, namely Fingal, South Dublin, Dublin City and Dún Laoghaire-Rathdown, have benefited from the type of geographical downscaling associated with OECD and Council of Europe recommendations to bring about a more optimum size and scale. Indeed, the amalgamations of local authorities (e.g. North and South Tipperary County Councils) and the abolition of town councils (in 2014) has set Ireland further apart from other western democracies, in terms of the geography of local government. The formation of municipal districts, of which there are ninety-five (n=95) in the State, stands out as the singular reform that offers Ireland the potential of a more contemporary geographical framework for local government, spatial planning and economic development. Chapter 1 (sections 21 and 22) of the Local Government (Reform) Act, 2021 ascribes particular significance to municipal districts, and it requires (subsection 22b) that local authority members be elected at that level – such that local authority membership is based on the collective of municipal districts. Moreover, as provided for in subsection 121, 2(a), a local authority may, subject to certain parameters, delegate any of its functions to the municipal district. This particular legislation confers local authorities with specific powers and responsibilities in respect of economic development, including the preparation and delivery of local economic and community plans (LECPs). Thus, the overwhelming body of international evidence and emerging best practices, including those enabled by legislative changes in Ireland, point to the merits of a sub-county analysis, and specifically at MD level.

The following table details the indicators used within the *D3 Report on the Transition Process Toward Climate Neutrality* analysis. From a detailed review of all quantitative and qualitative inputs, it is clear that a range of indicators were analysed at the NUTS 3 level only with results then attributed their constituent local authority (Table 1 below). The project team reviewed each indicator and identified their potential use in a sub-county or MD level analytical approach (see column MD level availability). While not all indicators were available at an MD level, most were either directly available or required additional processing to develop a suitable proxy indicator i.e., using authoritative local level national deprivation index rather than regional level EU SILC. A number of other specific environmental indicators and composite indicators used within the D3 Report have been produced at the local level but have not been incorporated into this analysis as they are not publicly available.

Table 1 below sets out the indicator theme (social, economic etc), the name of the original indicator, the geographical scale that the indicator was collated and analysed at within the D3 report and then the possibility of using this indicator for a sub-county or MD level in our analysis. All indicators identified as either ‘Yes’ or ‘Yes - Proxy Developed’ are further set out within Table 2 below in the section on Indicators and Assessment. As such, this

qualitative review process ensured that our approach was clearly linked to the D3 Report and builds on the existing analytical approach undertaken for the initial identification of 'most affected' territories (county level).

| Theme | Indicator | Geographical Scale (D3. Report) | MD level Availability |
|------------------------|---|-----------------------------------|-----------------------|
| Employment Impact Data | BNM Direct, Indirect & Induced Employment | County | Yes – Proxy Developed |
| Social | Population density per region | NUTS 3 results assigned to County | Yes |
| Social | Population living in rural areas in each region | NUTS 3 results assigned to County | Yes |
| Social | Disposable income per person by region | NUTS 3 results assigned to County | Yes – Proxy Developed |
| Social | Risk of poverty by region | NUTS 3 results assigned to County | Yes – Proxy Developed |
| Social | Consistent poverty by region | NUTS 3 results assigned to County | Yes – Proxy Developed |
| Social | Full-time education status of persons aged 15-24 by region | NUTS 3 results assigned to County | No |
| Social | Completed third level education, by region. Education attainment | NUTS 3 results assigned to County | Yes |
| Economic | Unemployment Rate | NUTS 3 results assigned to County | Yes |
| Economic | Labour Force Participation Rate | NUTS 3 results assigned to County | Yes |
| Economic | 15-24-year-olds neither in Employment nor Education and Training (NEET) | NUTS 3 results assigned to County | No |
| Economic | Gross Value Added per person per region | NUTS 3 results assigned to County | No |
| Economic | Professional Classes Ratio | NUTS 3 results assigned to County | Yes |
| Economic | Semi/unskilled Class Ratio | NUTS 3 results assigned to County | Yes |
| Economic | Working Population Engaged in Small and Medium Sized Businesses | NUTS 3 results assigned to County | No |
| Environment | Ambient Air Quality (PM2.5) | Small Area | No |
| Environment | CO2 emissions from Power and Industry per head of population | Small Area | No |
| Environment | Residential Heating Emissions (PM2.5) | Small Area | No |
| Environment | Average Building Energy Rating (BER) | Small Area | No |
| Composite | Home Heating Energy Poverty Risk Index | Small Area | No |
| Composite | Resistance to Change Index | Small Area | No |
| Composite | Working from Anywhere Index | Small Area | No |
| Composite | Jobs at Risk Index | Small Area | No |

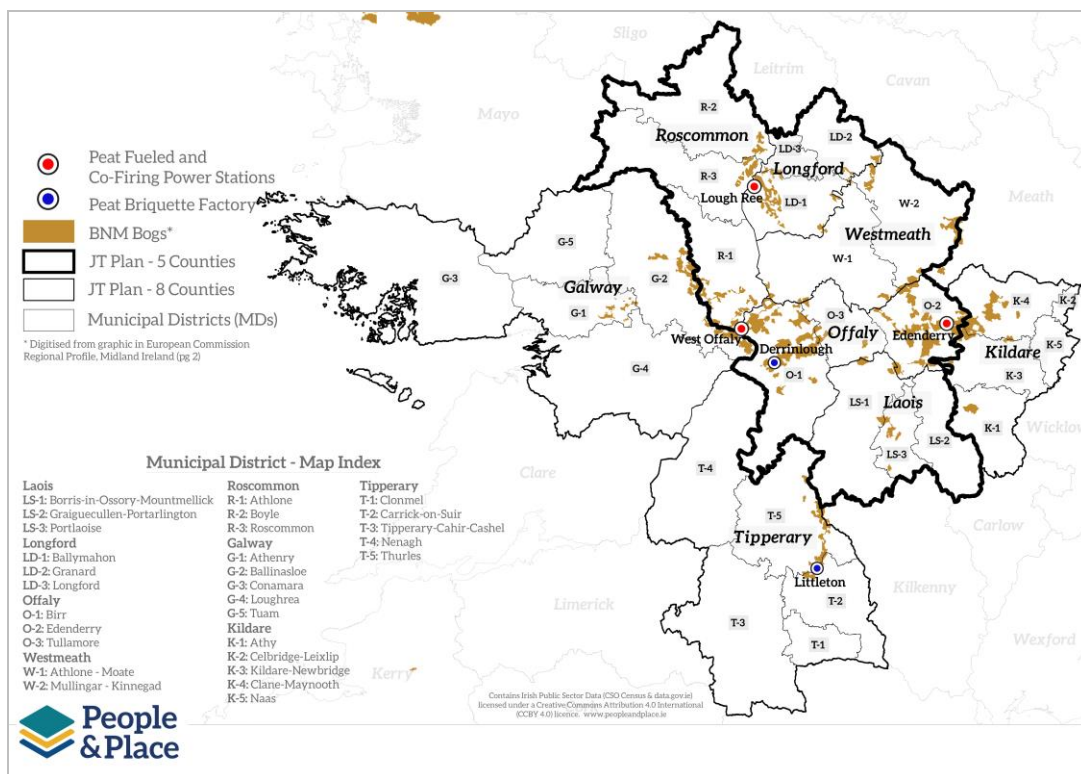
Table 1: D3. Report - Assessment Indicators and Geographical Availability

Following a review of all indicators and their appropriateness, validity and reliability in respect of assessing the impact on the surrounding (parts of) counties included in the current national JT policy, it was determined that a set of five indicator groups would be used in the assessment at the MD level – the key factor for inclusion was data availability at the MD level, direct linkage to the assessment carried out for the D3. Report assessment and, most importantly, a clear association with the past and present local activity to the peat industry. Where possible, an exact replica of each variable was used at MD level, or, in some cases, a valid proxy variable was developed to match it. Thus, by factoring into its analysis territorial characteristics and socio-economic dimensions, this approach follows the precedent set by the recently formed Shannon Estuary Task Force and previous regional jobs taskforces, such as those formed following the closures of firms such as Digital (Galway, 1992), Fruit of the Loom (Buncrana, 1998) and Tellabs (Drogheda, 2001) and the rationalisation of large employers such as Waterford Crystal (Waterford and Dungarvan, 2005), all of which sought to respond to the needs of displaced workers across the affected economic catchments. Internationally, post-industrial transitional arrangements and statutory interventions seek to respond to human capital needs and potential across the geographies that are affected by closures (Bailey *et al.*, 2014; OECD, 2013; Pike *et al.*, 2017; Vodden *et al.* 2019). Cross-border approaches by French and Belgian authorities, following the closures of textile plants – mainly in NE France, which affected communities in both countries, spawned collaborative ventures that subsequently underpinned the development of Lille Metropole, which is now one of the most dynamic inter-jurisdictional city regions in Europe. As the OECD (2019: 3) recommends:

“Achieving a just transition requires moving beyond traditional development policies towards those that maximise the potential of every region through a place-based approach. Doing so permits policymakers to consider the existing capabilities and legacies of regions in industrial transition, taking account of their specific characteristics.”

In order to be comprehensive in respect of the geographical footprint of the affected territory, it has been necessary to examine qualitative (as well as quantitative) data. In this regard, the over-riding variable is the distribution of Bord na Móna (current and past) peatlands. Their distribution gives effect not just to socio-economic patterns, but to settlements, communities and socio-cultural connections and identity – all of which are integral elements of place-making (defined as Territorial Characteristics in Table 2 below). NGOs, such as the Irish Peatland Conservation Council (IPCC) have documented the many cultural facets of working on, and living adjacent to, Ireland’s boglands. In geographical terms, the Bord na Móna peat area extends to about 80,000 hectares, and it includes 130 individual bogs that are organised and managed as Bog Groups. As outlined in the EU Commission *START Regional Profile*, a majority of those bogs are concentrated in the Midland Region and County Roscommon, although they also extend into West Kildare, East Galway, and North Tipperary.

Consequently, as noted earlier in respect of socio-economic characteristics, the more nuanced, but not insignificant, socio-cultural, heritage and community identity characteristics that are associated with the BnM boglands are not delimited by administrative regional and / or county boundaries. In fact, over a quarter (approximately 28%) of all Bord na Móna peat bogs are located outside the boundary of the NUTS 3 Midlands and County Roscommon. As detailed in Map 1 below, there are large BnM peat areas located within Kildare, East Galway and North Tipperary with the MDs of Clane-Maynooth, Ballinasloe and Thurles accounting for approximately twenty percent of all Bord na Móna peat areas. The distribution of the BnM peatlands and the associated locations of places of work and travel-to-work patterns clearly extend beyond the boundaries of the core counties (Midlands and Roscommon), and even when a facility is (or was) located in one county its significance can be felt and measured in an adjoining municipal district. For example, the Edenderry Powerplant is almost equidistant from the centre of Edenderry and the border with County Kildare (7km), and the second-closest town to it is Rathangan (Co. Kildare) – a distance of just 12km. Much of the built environment and the identity of towns such as Rathangan and villages such as Lullymore (also in County Kildare) are closely associated with life on the boglands. The close proximity of parts of East Galway to key peat industrial and manufacturing plants such as the now closed West Offaly peat-fuelled power plant (14km from Ballinasloe) and the significance, for the Thurles and Carrick-on-Suir MDs, of the now closed Littleton Briquette factory add to the body of evidence that supports an approach that transcends administrative boundaries and reflects socio-economic realities in delineating the appropriate JT territory.



Map 1: Location of Bord na Móna Peat Bogs within Municipal Districts (MDs) (ref: SMART Midlands Regional Profile)

The project team has also formulated a proxy indicator to enable a calculation of the MD residence of all workers employed at key peat industry locations such as the West Offaly, Edenderry and Lough Ree Power Plants and the Littleton and Derrinlough Peat Briquette factories. While this is not a local level analysis of the full scale of direct Bord na Móna and ESB employment (BNM direct employment estimated at 1,743 in D3. Report via Power 2018), it provides a useful relative analysis in respect of the level and extent of employment that is likely to have a specific impact on the surrounding (parts of) counties included in the current national JT policy approach i.e. North Tipperary, East Galway and (West) Kildare. This analysis is based on the 2016 Census POWCAR², and it uses an aggregate of the relevant Small Areas (n=1) and Workplace Zones (n=4) (note, Census 2016 was enumerated prior to associated job losses or plant closures). The output of this analysis is a percentage calculation of the total resident workers per MD (taking due account of the required suppression of individual data – for confidentiality purposes). As such, this highly relevant indicator (see Employment/Jobs in Table 2 below) provides a picture of the economic geography of peat industry-related employment at the local MD level.

Indicators and Assessment:

Cognisant that the D3. Report has already defined the ‘most affected’ counties as the NUTS 3 Midlands and County Roscommon (defined as JT5 within our analysis), our assessment is concentrated on all MDs within the counties (in their whole) that were not deemed as ‘most affected’ – Kildare (5 MDs), Tipperary (5 MDs) and Galway County (5 MDs). Our approach was to identify the ‘most affected’ of these 15 MDs and to identify those that most warranted inclusion within the existing JT5 region.

As documented in the D3. Report, there is no clear additive method for integrating the broad range of data considered in defining the most affected territory in the context of the EU JTF. Our approach, while different in parts, due to complementary and additional data availability at the MD level, follows a similar approach to the D3. Report, and it applies a weighted multicriteria decision matrix framework to achieve a data-driven and objective determination of ‘most affected’ MDs and final recommendation for consideration by the DCEE. Based on this framework, the total score available for each MD is 30 (higher numbers indicate being more ‘affected’), and marks are derived from their relative standing on a range of territorial, employment, environmental, economic and social indicators. The final set of applicable indicators and relative weightings for the overall appraisal are set out in Table 2 and detailed below.

² POWCAR is the CSO Census Place of Work Census of Anonymised Records. This database is available to registered Officers of Statistics to undertake specific origin-destination census analysis. All outputs must be approved by the CSO Census statisticians for use.

| Theme | Indicator | Max Score | MD Assessment* |
|-----------------------------|--|-----------|---|
| Territorial Characteristics | % Total Bord na Móna Peat Bog within MD | 10 | MD with the highest % of Bord na Móna Peat Bog receives a score of 10. Other MDs receive a score relative to MD with the highest %. |
| Employment/ Jobs | Estimation of direct peat related employment* by MD residence of workers | 5 | MDs with the highest % resident workers per MD receives a score of 5. Other MDs receive a score relative to MD with the highest %. |
| Environmental | % Permanent private households by central heating = Peat | 5 | MDs with % > JT5 average (24.2%) receive score of 5, MDs with a % > State average (5.3%) but < JT5 average receive score of 3, MDs with a % < State average receive score of 0. |
| Economic | Census Unemployment Rate | 1 | % rate > JT5 average (15.7%) (score = 1), % rate < JT5 average (score = 0) |
| Economic | Labour Force Participation Rate | 1 | % rate < JT5 average (60.3%) receives a score of 1, MDs with a % > JT5 average receive a score of 0. |
| Economic | Professional Classes Ratio | 1 | % rate < JT5 average (26.4%) (score = 1), % rate > JT5 average (score = 0) |
| Economic | Semi/Unskilled class Ratio | 1 | % rate > JT5 average (12.9%) (score = 1), % rate < JT5 average (score = 0) |
| Economic | Average Household Income (€) | 1 | € < JT5 average (€41,720) (score = 1), € > JT5 average (score = 0) |
| Social | Age Dependency Rate (0-14/65+ as a proportion of 15-64) | 1 | % rate > JT5 average (57%) (score = 1), % rate < JT5 average (score = 0) |
| Social | Population Living in Rural Areas*** | 1 | % rate > JT5 average (58.2%) (score = 1), % rate < JT5 average (score = 0) |
| Social | Population Density per square km | 1 | Density < JT5 average (38.8 per km ²) (score = 1), density > JT5 average (score = 0) |
| Social | Third-Level Education Attainment | 1 | % rate < JT5 average (26.7%) (score = 1), % rate > JT5 average (score = 0) |
| Social | Population living in Disadvantaged Areas**** | 1 | % rate > JT5 average (17.1%) (score = 1), % rate < JT5 average (score = 0) |

Table 2: Indicators and Scoring used in assessing the Socio-Economic Geography of the MDs in counties adjoining the Midlands

*Depending on the indicator, an MD will receive a score based on its position relative to the JT5 value. For instance, an MD unemployment rate > JT5 average is deemed to be negative (score of 1) but a Labour Force Participation rate < JT5 value is also deemed to be negative (score of 1).

**Analysis based on estimate of employment at the main power plants and briquette factories using a single aggregation of all relevant Small Areas and Workplace Zones. Estimates at percentage by MD is only available due to necessary data suppression measures – for confidentiality purposes.

*** As per the CSO definition and that used in D3. Report, rural areas are defined as all areas outside settlements >1,500 population.

**** Calculated using the Pobal HP Deprivation Index and including all population living in areas classed as Disadvantaged, Very Disadvantaged and Extremely Disadvantaged.

1. Territorial Characteristics (w=10)
 - a. The socio-cultural, heritage and community identity characteristics that are associated with the BnM boglands and their location is a key variable in identifying the MDs that are most linked to, and by association, be 'most affected' by the transition away from peat harvesting. Their distribution gives effect not just to socio-economic patterns, but to settlements, communities and socio-cultural connections and identity – all of which are integral elements of place-making, as highlighted in the international literature. With approximately 30% of all Bord Na Móna peat bogs located outside the NUTS 3 Midlands and Roscommon, it was deemed critical to include this as the key variable within the overall assessment.
 - b. Deemed the key variable that would identify an MD's integral territorial and socio-cultural connection with peat harvesting this indicator was weighted with a score of 10 in the overall assessment.
2. Employment/Jobs (w=5)
 - a. In the absence of any direct sub-county employment-related data, this indicator was constructed using the CSO POWSCAR database. An analysis was carried out to enable the mapping of the residential locations of resident workers associated with five local geographical employment areas (1 small area and 4 CSO workplace zones) aggregated to the MD level. The employment geographies are associated with the locations of the key peat industry locations namely the West Offaly, Edenderry and Lough Ree Power Plants and the Littleton and Derrinlough Peat Briquette factories. Due consideration was given to data confidentiality and the final output was an aggregate of all five geographical employment areas. This approach was reviewed and approved for release and use from the POWCAR secure statistical portal by the CSO (January 2022).
 - b. A weighting of 5 was applied to this indicator, as it was deemed to be directly related to the relative spatial distribution of the functional economic territory associated with peat harvesting and associated industries.
3. Environmental (w=5)
 - a. Based on local level data from the 2016 Census, this single environmental indicator highlights MDs (and areas therein) where the use of peat as a primary source of central heating. Again, this indicator is directly associated with the harvesting and residential use of / dependency on³ peat. This distribution is clearly visible in the supporting maps in Appendix 1.
 - b. A weighting of 5 was applied to this indicator, as it was deemed to be directly related to the relative spatial distribution of peat harvesting and residential use.

³Low-income households are likely (than are those in the higher socio-economic groups) to use peat or coal as their primary fuel source, as they lack the finances to install and run central heating systems (Goodman, 2011; Social Justice Ireland, 2021).

4. Economic and Social Themes (w=5 per theme)
 - a. Both the economic and social themes are comprised of 5 indicators that relate to the underlying socio-economic characteristics within the relevant MDs. Each individual indicator's selection was based on its existing application in the D3. Report (analysed at a NUTS 3 level and assigned to county scores). Where possible, a directly matching or relevant proxy was derived using authoritative and official statistical data from the CSO. The analysis undertaken for each indicator identifies if an MD is fairing better or worse off than the existing NUTS 3 Midlands and Roscommon average.
 - b. Each individual indicator received a weight of 1 (max five per theme). Indicators received the lower weighting of 1 due to the fact that the underlying variable can also be affected by extraneous factors (deindustrialisation, rurality etc.) that are not specifically related to peat harvesting and associated industries.

Results:

The objective of this analysis has been to identify sub-county areas, outside the core JT5, that exhibit similar or greater levels (to the JT5) of socio-economic constraint associated with their historical dependence on peat and peat-related activities. This has been motivated by the need to ensure a 'whole-of-territory' approach, so the geographical delineation of the JT is commensurate with socio-economic realities, and not delimited to the vagrancies that are often associated with county boundaries.

Following an analysis of all relevant indicators through our assessment process, the data point to the inclusion of the following as the 'most affected' MDs in addition to the current JT5 areas:

- ✓ The Ballinasloe MD (County Galway);
- ✓ The Thurles MD (County Tipperary);
- ✓ The Carrick-on-Suir MD (County Tipperary);
- ✓ The Clane-Maynooth MD (County Kildare) and
- ✓ The Athy MD (County Kildare).

Table 3 below presents the aggregate results of the assessment and clearly shows that these five MDs are 'most affected'. The MDs of Ballinasloe (25.4) and Thurles (20.1) have by far the highest scores, followed by Carrick-on-Suir (14.7), whereas there is a marginal difference between Clane-Maynooth (12.9), Athy (10.3) and Conamara (9). Other MDs, which have had strong administrative, industrial, heritage and social associations with BnaM activities score lower than the five recommended MDs, as their demographic and socio-economic profiles have been shaped by a range of recent developments and contemporary factors, including economic diversification, urbanisation and proximity to metropolitan zones – including

those that have benefited from significant investments over the course of the current and previous national development plans.

People & Place recommends the inclusion of these five MDs, based on their aggregate scores, which have been objectively derived through a strongly data-driven methodology (as outlined above and linked to a similar analytical approach in the D3. Report). We recommend the specific inclusion of the Clane-Maynooth MD and the Athy MD over the other MDs with aggregate scores that exceed nine (9 points) because:

- In addition to experiencing the adverse effects of the transition away from peat-based activities (composting facility at Kilberry), the Athy MD has been affected by other processes of deindustrialisation. These include the closures of manufacturing plants (including Coca-Cola in 2018) in the town and nearby in Carlow (Irish Sugar and Braun). Thus, while BnaM activities were, in relative terms, less extensive in the Athy MD than in the other recommended MDs, the cumulative impact of deindustrialisation processes, in this MD, is such that the area merits attention. Kildare County Council's *Athy Local Area Plan 2021-2027* (p. 48) notes the need to create 1,330 jobs in Athy to enable the town to achieve a jobs ratio of 0.70 (Between 2011 and 2016, Athy's jobs ratio fell from 0.73 to 0.68); and
- As the following set of maps (Annex 1) illustrates, the west of the Clane-Maynooth MD has a demographic and socio-economic profile, on the relevant selection criteria, that is more consistent with that of County Offaly than with the more urbanised parts of East County Kildare. Thus, the aggregate score for the west of the Clane-Maynooth MD (based on EDs to the west of an imaginary line from Prosperous to Kilcock) would be similar to that of the Edenderry MD;
- The maps also illustrate the significance of local-level factors within the Carrick-on-Suir MD. While the town of Carrick-on-Suir and most of South Tipperary do not exhibit any of the qualifying criteria, the northern part of the MD (similar to the western part of the Clane-Maynooth MD) has been intrinsically bound-up within the peat-based socio-economy in ways that are similar to those of the adjoining Thurles MD. These features are clearly evident in the communities across the Sliabh Ardagh Uplands and in areas north of a line from Moyglass to Mullinahoe.

Distinct from the above-mentioned MDs, the Conamara MD is not contiguous with the Midlands Region or any of the high-scoring MDs in the table above, and its inclusion would not be consistent with the aforementioned need for strategic and territorially coherent place-making in the rollout of the JT strategic actions. Its inclusion would represent a geographical disjuncture from the contiguous area formed by the JT5 and the five adjoining additional MDs (as recommended here). Moreover, Conamara's score is driven by extraneous factors, rather than by the just transition variables. In statistical terms, the Conamara MD represents a natural break between the five highest-scoring MDs (all ≥ 10.3) and the subsequent MDs (all ≤ 8.6).

| Municipal District (MD) | Territorial Characteristics | Employment/ Jobs | Environmental | Economic | Social | Total |
|---------------------------------------|-----------------------------|------------------|---------------|----------|--------|-------|
| G-2: Ballinasloe (MD) | 10.0 | 2.4 | 5 | 4.0 | 4.0 | 25.4 |
| T-5: Thurles (MD) | 4.2 | 5.0 | 3 | 4.0 | 4.0 | 20.2 |
| T-2: Carrick-on-Suir (MD) | 1.9 | 2.8 | 0 | 5.0 | 5.0 | 14.7 |
| K-4: Clane-Maynooth (MD) | 8.9 | 1.0 | 3 | 0.0 | 0.0 | 12.9 |
| K-1: Athy (MD) | 1.3 | 0.0 | 3 | 2.0 | 4.0 | 10.3 |
| G-3: Conamara (MD) | 0.0 | 0.0 | 3 | 2.0 | 4.0 | 9.0 |
| T-3: Tipperary-Cahir-Cashel (MD) | 0.0 | 0.6 | 0 | 4.0 | 4.0 | 8.6 |
| G-5: Tuam (MD) | 0.0 | 0.0 | 5 | 1.0 | 2.0 | 8.0 |
| G-1: Athenry (MD) | 1.9 | 0.0 | 3 | 1.0 | 1.0 | 6.9 |
| T-4: Nenagh (MD) | 0.0 | 0.7 | 3 | 0.0 | 3.0 | 6.7 |
| G-4: Loughrea (MD) | 0.0 | 0.7 | 3 | 0.0 | 3.0 | 6.7 |
| K-3: Kildare-Newbridge (MD) | 2.6 | 0.0 | 3 | 0.0 | 0.0 | 5.6 |
| T-1: Borough District of Clonmel (MD) | 0.0 | 0.0 | 0 | 3.0 | 1.0 | 4.0 |
| K-2: Celbridge-Leixlip (MD) | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| K-5: Naas (MD) | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |

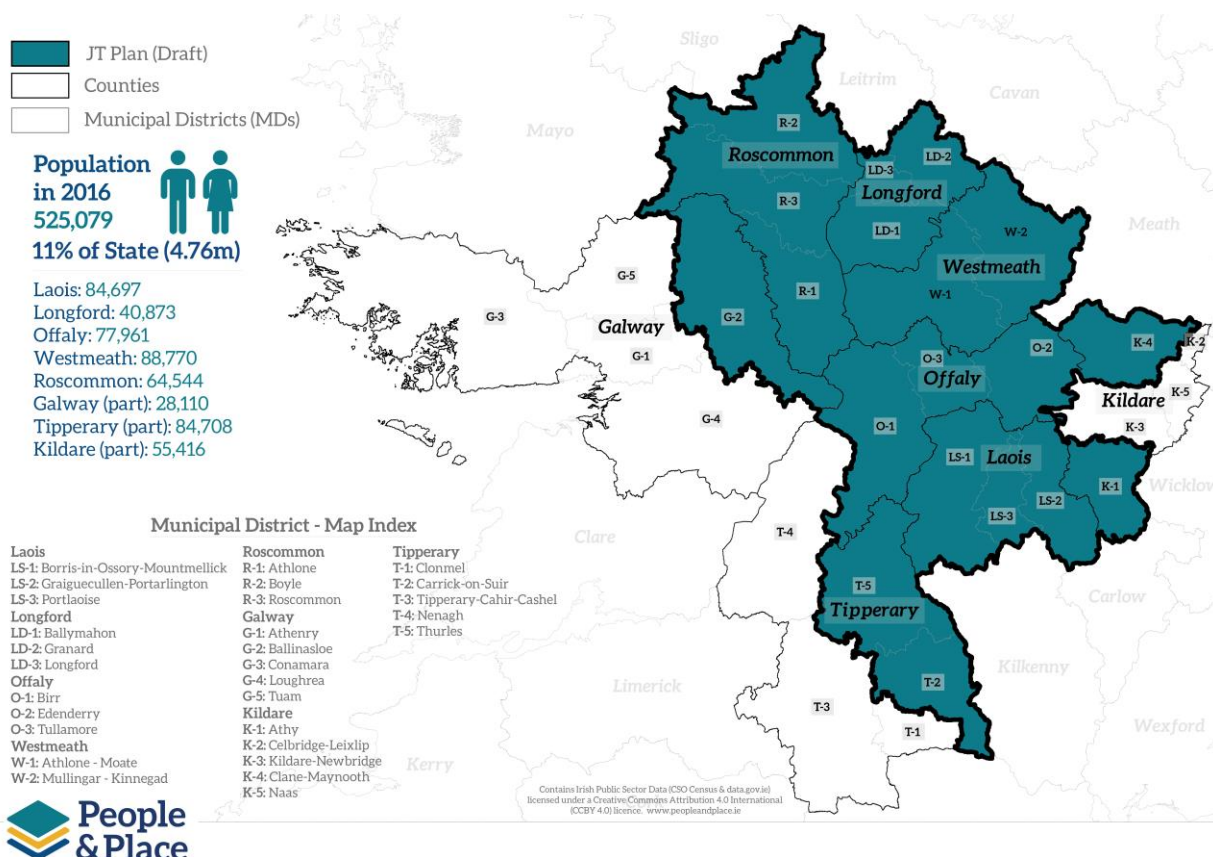
Table 3: Aggregate MD Scores and Ranking

Total Population of proposed EU Territorial Just Transition Plan – Ireland

The total population of the proposed aggregate geographical territory comprising of the Midlands, Roscommon and the five identified MDs is 525,079 (2016 Census). This figure accounts for 11% of the total population of Ireland as enumerated in the 2016 Census (4.761m).

While no official sub-regional population figures are available for Ireland post Census 2016, it has been estimated by the Central Statistics Office that the total population of Ireland has increased by +272k (+5.7%) to a total of 5.01m in April 2021 (2016-2021). As such, it is likely that the current population (2021) of the proposed Territorial Just Transition Plan would be approximately 550k. In early 2023, the results from Census 2022 will be available at the MD level for Ireland and at that point a more accurate population estimate will be available.

Map 2 below sets out the proposed territory and the total population for each relevant local authority.



Map 2: Proposed EU Territorial Just Transition Plan and Total Population (Census 2016)

References

- Bailey, D.; Bentley, G.; deRuttyer, A. and Hall, S. (2014) 'Plant closures and taskforce responses: an analysis of the impact of and policy response to MG Rover in Birmingham', *Regional Studies, Regional Science*, 1(1): 60-78
- Boyle, R. (2016) 'Re-shaping Local Government - Overview of selected international experience with local government reorganisation, mergers, amalgamation and coordination' *Local Government Research Series*, Report No. 10. Dublin: Institute of Public Administration.
- Callanan, M. (2011) 'Review of International Local Government Efficiency Reforms' *Local Government Research Series*, Report No. 1. Dublin: Institute of Public Administration.
- DeVries, M. S. and Sobis, I. (2013) 'Consolidation in Local Government: An International Comparison of Arguments and Practices', *Administration*, Vol. 61, No. 3, pp. 31-50.
- Goodman, P. (2011) *Fuel Poverty, Older People and Cold Weather: An All-Island Analysis, Report*.
- Kildare County Council (2021) *Athy Local Area Plan 2021-2027*.
- OECD (2013) *Activation strategies for stronger and more inclusive labour markets in G20 countries: key policy challenges and good practices*. Paris: OECD.
- OECD (2019) *Regions in industrial transition – policies for people and places*. Paris: OECD.
- Pike, A.; Rodríguez-Pose, A., and Tomaney, J. (2017) *Local and regional development*, 2nd Edition. London: Routledge.
- Social Justice Ireland (2021) *Energy poverty and a just transition*. Available online at: <https://www.socialjustice.ie/content/policy-issues/energy-poverty-and-just-transition>
- Vodden, K.; Douglas, D.; Markey, S. Minnes, S and Reimer, B. eds. (2019) *The theory, practice, and potential of regional development: The case of Canada*. Routledge.

Appendix 1 – Supporting Maps

