

# Transition Town Kingston - Energy Group Submission to Kingston Local Plan 2019 - 2041: Public Consultation



Final 25<sup>th</sup> Feb 2023 A

## 1. General Comments

As residents of the Royal Borough of Kingston and members of the Transition Town Kingston - Energy Group (TTK-EG), we would like our local council to be at the forefront of efforts in leading and enabling Kingston upon Thames to become one of the most sustainable, net zero carbon and climate change resilient boroughs in Greater London - to the benefit of present and future generations and the environment in which we live and depend on.

Accordingly, as representatives of the TTK-EG, in a spirit of collaboration and partnership, in response to the Kingston Local Plan Public Consultation, we have provided a series of additional, complementary actions and amendments to the draft policies, KPIs and Targets - notably for KC7 Minimising Greenhouse Emissions & KC8 Energy Infrastructure. We believe the current policies, KPIs and Targets as outlined in the first draft of the Kingston Local Plan would benefit from further elaboration to provide a more ambitious and stronger set of regulatory measures, standards, principles, priority actions, indicators and targets. This is particularly pertinent given the RBK is one of the boroughs that has declared a “*climate emergency*” and stated that the Kingston Local Plan needs to “*set the design bar high to ensure development meets present and future needs*”.

The targets of the Greater London Authority Boroughs supports the need for the high bar as Kingston currently ranks 5 th from bottom on a timeline for Net Zero in the GLA.

<https://www.communityenergy.london/council-climate-emergency-action-plans/> Achieving Carbon Neutrality before 2038 would be more than desirable.

Moreover, the KPIs and associated targets as detailed in the local plan are not yet fully coherent with the various priorities outlined in the plan’s policy narrative. These need to be more closely aligned with the policies, in order to support the delivery of the vision and objectives within the local plan. Importantly, the KPIs & Targets needs to be made **Specific, Measurable, Achievable, Relevant and Time-bound** (SMART). This will help to increase transparency and accountability, essential to build political commitment and translate policy aspiration into tangible actions on the ground.

Last but not least, there needs to be clear **baselines** established from which progress towards the KPIs and Targets can be measured, in order to measure the rate of change and

effectiveness of policy implementation. To date the local plan is already four years into the 2019-2041 timeframe, and it is not clear at this stage what the existing reference points / baselines are against which future progress will be measured, and against which ambitious yet achievable forward looking KPIs and targets can be developed.

## 2. Draft Policy KC7: Minimising Greenhouse Gas Emissions

### **Suggested Additional Policy Inputs - Policy KC7: Minimising Greenhouse Gas**

A1: All development to reduce greenhouse gas emissions in operation and minimise both annual and peak energy demand in accordance with the London Plan energy hierarchy:

- To be compliant with international standards and best practices, notably:
  - i. ISO 37101: Requirements and guidance on the establishment of a management system for sustainable development in communities
  - ii. ISO 26000: Developed to help organisations effectively assess and address social responsibilities that are relevant and significant to their mission and vision; operations and processes; customers, employees, communities, and other stakeholders; and environmental impact.
  - iii. ISO 14001: Requirements for an environmental management system (EMS) for an organisation that is integrated with the overall business management process

B: All development, including conversions and changes of use that result in the creation of 1 or more dwellings, are required to:

- Where appropriate, demonstrate the development will not need further retrofit before 2050 for energy efficiency to allow Kingston and UK to meet Net Zero goals.
- Where appropriate, support mid-life upgrade and retrofit, including consideration of new solar technology, battery storage, green hydrogen options or other clean energy solutions
- Large householder planning applications (i.e. more than 25% of existing usable floor area) to submit a Phased Retrofit Plan demonstrating how the energy efficiency of the whole property can be improved and support the phase-out of fossil fuel heating systems to help achieve Net Zero for the borough by 2038

C: All new build development resulting in the creation of 1 or more dwellings and/or 500 square metres (gross) or more non-residential floorspace must demonstrate:

- Full consideration for the design and Implementation of *on-site* renewable energy generation options, including solar and other clean energy solutions
- Promote connection and use of “green energy” suppliers
- Demonstrate the development will not need further retrofit before 2050 for energy efficiency to allow Kingston and the UK to meet Net Zero goals

- Where appropriate, support mid-life upgrades and retrofits, including consideration of new solar technology, battery storage or adaptation for green hydrogen and/or other clean energy solutions

#### D: Infrastructure

- Self-sufficient street lighting solutions through LED lighting and solar panelling technology, including consideration for reducing light pollution.
- Integrated EV charger with lamppost or ground retractable EV charger points to minimise clutter

### 3. Draft Policy KC8: Energy Infrastructure

#### **Suggested Additional Policy Inputs KC8 Energy Infrastructure – proposed TTK-EG**

##### 1. To achieve the potential of renewables in RBK:

- Pro-Solar Policy: Enabling policy and actions / incentives supportive of mandatory installation of solar on domestic, public and commercial rooftops on all new build developments, and appropriate retro-fitting of existing building and/or extensions
- Pro-Solar Policy: Policy and planning actions supportive of ground-mounted solar farms, co-located with battery energy storage systems on brownfield land and lower quality agricultural land and open spaces such as car parks i.e. contribution towards delivery of Kingston decentralised energy network

##### 2. Energy efficiency policy – new build developments and retro-fitted / existing buildings:

- Work with energy infrastructure providers, in particular the electricity Distribution Network Operator(s), to ensure that RBK homes and other buildings have adequate capacity for full electrification with new EV and HP load, and PV and other microgeneration, at the scale required for 2038 (RBK) and 2050 (UK and global) Net Zero goals.
- RBK to encourage and provide appropriate support to developers and the DNO to install three-phase supplies where possible to facilitate greater flows to and from each building, including homes.
- All new developments should incorporate S,E or W facing roof mounted PVs when practicable.
- All new developments of multiple residential and commercial units to give consideration to where practical, facilitate the installation of a microgrid system allowing managed/metered energy transfer between units
- Development for multiple units should include a communally accessible space suitable for a battery installation which would allow excess energy to be stored and subsequently shared between units i.e. to maximise self-consumption

- Where practical, all developments not connected to a local microgrid or district heat system should be able to accommodate enough electrical and/or heat storage to minimise imports for at least space heating during peak demand times, thus at least 4h of typical heat demand, such as per <https://doi.org/10.1016/j.energy.2022.125298>
- All planning requests and building control to improve building and other energy efficiency and demand shifting, such as insulation measures and energy storage, should be presumed to be permitted, and be handled as quickly and simply and cheaply as possible, unless there is good reason otherwise. NOTE: The number of such requests, accepted / rejected / stalled and total cost and time to conclude should be monitored, and handling time to approval and abandonments should reduce against baseline figures by at least 20%

#### 4. Chapter 12 Implementation and Monitoring (Kingston Local Plan P154)

##### 4.1 KC7 Minimising Greenhouse Emissions

Existing KPIs and Targets within draft Local Plan - Implementation and Monitoring		
Policy	Key Performance Indicators	Targets
<b>KC7: Minimising Greenhouse Emissions</b>	<ul style="list-style-type: none"> <li>➤ Number of developments supported by an Energy Statement / Strategy</li> <li>➤ Level of on-site carbon reduction</li> </ul> <p>Current baselines / reference points ?</p>	<ul style="list-style-type: none"> <li>➤ All relevant developments to achieve net zero carbon by when?</li> <li>➤ Minimum of 35% on site carbon reduction beyond building regulations - by when?</li> <li>➤ RBK net zero by 2030</li> </ul>

Additional Greenhouse Emissions KPIs and Targets proposed by TTK-EG		
Policy	Key Performance Indicators	Targets
KC7 Minimising Greenhouse Emissions	<ul style="list-style-type: none"> <li>➤ All new and retrofitted developments to achieve a minimum thermal performance of an HLP of 2 kWh/m<sup>2</sup>/yr confirmed by submission of a building test certificate</li> <li>➤ Passive House for new, EnerPHit for refurb.</li> </ul>	<ul style="list-style-type: none"> <li>➤ RBK net zero by 2030</li> <li>➤ Proportion of developments compliant with net heat loss requirement by 2030</li> <li>➤ Net heat loss targets proposed 2W/m<sup>2</sup> OK Baseline /Reference point req'd</li> </ul>
KC7 Minimising Greenhouse Emissions	<ul style="list-style-type: none"> <li>➤ Percentage of borough housing stock achieving an EPC rating of B or above</li> </ul>	Start with baseline number in 2023, with a target to achieve 100% B or above by 2050

	NOTE: Distinguish between council owned & private property stock.	
KC7 Minimising Greenhouse Emissions	➤ Number of retrofits being carried out in the borough annually achieving an EPC rating B or above	Current baseline? 50 % increase on 2023 baseline by 2030
KC7 Minimising Greenhouse Emission	➤ Percentage of commercial and public buildings achieving an EPC B rating or above	Start baseline number in 2023 with a target to achieve 100% Rating B or above by 2050
KC7 Minimising Greenhouse Emission	<ul style="list-style-type: none"> <li>➤ Ensure “residential property let by council rated at C or above” - rising to 80% by 2030 &amp; 100% by 2035</li> <li>➤ Number of innovative funding grant applications secured from public / private resources</li> </ul>	<ul style="list-style-type: none"> <li>➤ Increasing percentage of funding secured for priority KC7 from non RBK sources</li> </ul> <p>Baseline / reference point required</p>

## 4.2. KC8: Energy Infrastructure

### TTK - EG General Comments

How we generate energy has the largest impact on carbon emissions. RBK to establish current baseline for percentage of power generated from renewables – this percentage can inform the Key Performance Indicator (KPI) for this sector. With minimal potential for hydro (River Thames Scheme) and/ or wind generation and limited biogas and heat pump options, solar power offers one of the cheapest technologies with the greatest potential to increase percentage of power from renewables in the borough. Accordingly RBK to actively promote, support and monitor the installation and utilisation of solar PV on all new developments and refurb / extensions where reasonably practicable.

<b>Comparison of prices for energy generation (Carbon Brief - August 2022)</b>	
<ul style="list-style-type: none"> <li>• Gas - £446 / MWh (Ukraine conflict impact)</li> <li>• Nuclear - £106 / MWh</li> <li>• Solar - £55 / MWh</li> </ul>	<ul style="list-style-type: none"> <li>• Onshore wind - £50 / MWh</li> <li>• Offshore wind - £44 / MWh</li> </ul> <p style="color: red; font-weight: bold;">Retail Electricity Rate - Kingston Household:  <u>£336.3 / MWh</u> (Ovo Energy – Feb 2023)</p>
<p><b>NOTE:</b> At the time of the TTK-EG submission (February 2023), the UK is experiencing unprecedented energy price inflation, primarily attributed to the Russia - Ukraine conflict disrupting European gas supplies. This has resulted in business closures and substantial increases in fuel poverty, particularly impacting on large families, low income groups, lone parents and pensioners.</p>	

An estimated 6.7 million UK *households* are currently living in fuel poverty, ranging from 47.5 % in London to 71.7 % in Northern Ireland. Social Policy Research Unit, University of York 2022

Fuel poverty is related to income levels, fuel prices and the energy usage and efficiency of homes, including the quality of building insulation. The UK has one of the lowest energy efficient housing stock in Northern Europe, whilst UK households currently pay some of the highest retail energy prices in the world.

During this period of rising fuel poverty, the UK's private (primarily foreign owned) energy companies (generation / procurement, transmission, distribution) are making unprecedented profits. Paradoxically, although the UK has the second highest amount of power generated using natural gas (85% of homes are gas heated), the UK is one of the European countries least dependent on Russian-Ukraine gas supplies and has some of the best renewable energy resources in the world.

In recognition of compounding risks of climate change, ecosystems decline and rising geopolitical tensions, together with the increasing level of fuel poverty facing local households, we request RBK to be more ambitious in the fundamentally important greenhouse emissions and energy sectors. This involves underpinning policy directives with a range of SMART targets and indicators (with clear baselines) to guide policy implementation, measure progress, and ensure transparency and accountability for the delivery of the required changes. The achievement of these policy objectives should include greater use of innovative public and private sector funding modalities to secure additional resources to scale out priority actions. Consideration should also be given to the use of current carbon offsetting and / or carbon credits as a mechanism that may inadvertently delay the transition to a low carbon economy in the context of the climate emergency.

The energy infrastructure should extend to physical infrastructure across the borough. For example, *street lighting* (incl. minimising light contamination) should use LED and solar technology solutions unless circumstances make it ineffective.

Existing KPIs / Targets within draft Local Plan - Implementation & Monitoring		
Policy	Key Performance Indicators	Targets
KC8: Energy Infrastructure	<ul style="list-style-type: none"> <li>➤ Number of developments connected to the decentralised energy network</li> <li>➤ Number of major developments within Heat Network Priority Areas</li> </ul> <p>What are required actions within a Heat Network Priority Area (HNPA) Number of designated HNPAs</p>	<ul style="list-style-type: none"> <li>➤ All relevant developments to be connected to the decentralised energy network</li> <li>➤ Major developments within Heat Network Priority Areas to comply with all relevant policies??</li> <li>➤ Proportion RBK wards classified as Heat Network Priority Areas</li> </ul>

	Current baselines / reference point?	These are not SMART targets
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Additional Energy Infrastructure KPIs and Targets proposed by TTK-EG		
Policy	Key Performance Indicators	Targets
KC8 Renewable Energy	<ul style="list-style-type: none"> <li>➤ Percentage energy generated from renewables (Est 2023 baseline)</li> <li>➤ RBK Total MW of solar on rooftops (MWh/y) generated - maintained within normal degradation limits</li> <li>➤ Numbers of projects connected to district heating schemes incl. heat pump schemes e.g. Hogshill sewage-to-power project</li> <li>➤ KPI for energy storage? [See Australian and German experience]</li> <li>➤ Number of commercial / domestic decentralised grid energy networks</li> <li>➤ New housing developments (comprising 5 units or more) able to be powered by a net zero microgrid. Properties within microgrid using smart technology, with national grid import / export option</li> <li>➤ Number of innovative funding grant applications secured from public / private resource providers</li> <li>➤ Develop KPI for RBK financial resource allocations for KC 7 &amp; KC 8 Policy implementation</li> </ul>	<ul style="list-style-type: none"> <li>➤ Fiftyfold increase in solar energy capacity by 2030</li> <li>➤ Less than 10% of new build without solar by 2030</li> <li>➤ PV covering own *annual* demand by 2038.</li> <li>➤ 50% of all substantial new build developments connected to decentralised energy and local secondary heat sources by 2030</li> <li>➤ Target for energy storage?</li> <li>➤ Increasing proportion of energy produced within RBK from decentralised networks 2030</li> <li>➤ Increasing proportion of “community energy” generated by 2030 i.e. owned and managed by local community interest companies</li> <li>➤ Percentage increase in installation of housing micro-grid schemes by 2030</li> <li>➤ Increasing percentage of funding secured for priority KC7 from non RBK private and public sources</li> </ul> <p>Baseline / Reference Points required</p>
KC8 Energy Efficiency	<ul style="list-style-type: none"> <li>➤ KPIs for energy efficiency .....</li> <li>➤ Percentage street lighting using LED</li> </ul> <p>Baseline / Reference Points required</p>	<ul style="list-style-type: none"> <li>➤ Energy efficiency targets for new build and retro-fitting existing buildings [at least EnerPHit]</li> <li>➤ 100 % of street lighting using energy saving systems by 2040</li> <li>➤ Spilled street lighting outside</li> </ul>

		appropriate area and W/person consumption to be in bottom quartile of UK LAs by 2038.
KT 1 Transport	<ul style="list-style-type: none"> <li>➤ KPI for use of low emission public / private vehicles</li> <li>➤ Facilitate “15-minute town” as measured for active travel, e.g. no key resource more than 15-minutes on foot for more than ~10% of residents including recycling points</li> </ul>	<ul style="list-style-type: none"> <li>➤ All public services / utility vehicles within RBK to be ultra low emission / electric vehicles by 2030</li> </ul> <p>NOTE: Collaboration with bus / train companies to support development of targets and definitions as appropriate</p> <p>Baseline / Reference Points required</p>
KT3 Transport Infrastructure	<ul style="list-style-type: none"> <li>➤ KPI for smart charging infrastructure across the borough, including non-car modes</li> </ul>	<ul style="list-style-type: none"> <li>➤ All new build developments to have smart (grid-responsive) EV charging points or alternative provision for active travel and other e-mobility</li> </ul> <p>Baseline / Reference Points required</p>