

Transforming Kuala Lumpur to a Carbon Neutral City by 2050

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Referencing: Draft Kuala Lumpur Structure Plan 2040 and Draft outline of the Kuala Lumpur Local Plan 2040

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The Draft Kuala Lumpur Structure Plan 2040 (PSKL 2040) titled "City for All" underwent a series of stakeholder consultations in early 2020 and is now available online for public viewing. With that in place, DBKL is now in the midst of gathering input, by means of Focus Group Discussions with government and private agencies for the preparation of a Draft Kuala Lumpur Local Plan 2040 (PTKL 2040).

IEN was invited to participate in two of the Focus Group Discussions – FGD 11 which involved Transportation Agencies (our Director, Gregers Reimann is everyone's favorite Kuala Lumpur Cycling advocate!), and FGD 13 which covered Infrastructure, Environment & Technology.

So, what exactly do these plans mean to us? In a simple hierarchy of development plans, the PSKL 2040 and PTKL 2040 fall under the jurisdiction of the Federal Territory Planning Act 1982 (Act 267). While PSKL 2040 sets out the planning and development policies and strategies for the federal territory of Kuala Lumpur, the PTKL 2040 zooms in these strategies through the implementation of a Development Control Plan covering the strategic areas of Kuala Lumpur.

PSKL 2040 Targets

Now for the fun part, here's a summary of goals and targets outlined in the Draft PSKL 2040 and PTKL 2040 that caught our attention:

1. CO2 Emissions Reduction

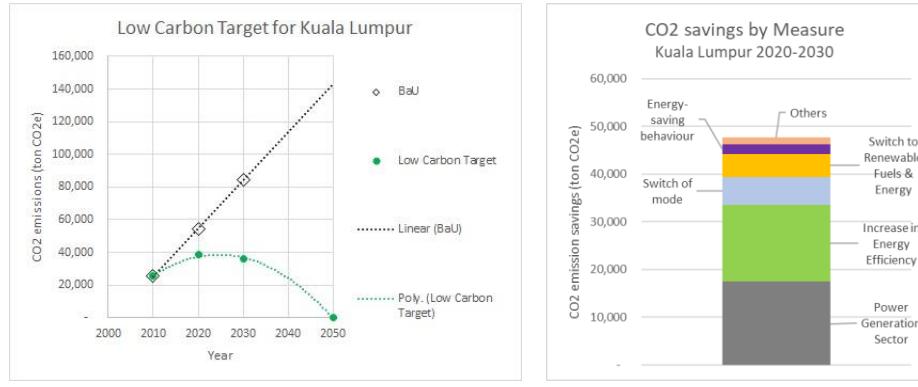
Kuala Lumpur shall be a carbon neutral city by 2050!

The document outlines the key areas of carbon emission reductions over the next 30 years. It is expected that the power generation sector and energy efficiency across all sectors will contribute to a 70% reduction in CO2 emissions in KL by 2030, further enhancement in these sectors and ramping up of renewable energy, switch off mode in the transportation sector and end-user behavior changes is expected to bring us to a carbon neutral status by 2050.

2. Green Buildings

We were thrilled to hear that DBKL has proposed to include the Green Building Index certification for all new developments as part of the Development Control Plan in the PTKL 2040. In addition to that, IEN has proposed the following recommendations as part of our involvement in the FGD:

- i. All new construction above 4000 m² to be at least GBI Gold certified (aka 2nd highest green certification level)
- i. At least 80% of the GBI points in the category "Energy Efficiency" must be scored
- ii. Full points must be scored for the GBI credits "public transportation access", "green vehicle priority", "construction waste management" and "Earthworks - Construction Activity Pollution Control".
- iii. For buildings with central cooling plants, all points must be scored for "environmentally friendly refrigerant" complying to the Montreal Protocol of zero ODP refrigerant as well as being a lower toxicity (Class A) refrigerant as per ISO 817:2014 standard.
- iv. For GBI Platinum certified buildings (aka the highest green certification level), the plot ratio can be increased by 5%. The developer must issue a performance bond (5% of construction value) until the final GBI certification (CVA) is achieved.



The Business-as-Usual (Bau) scenario provided in PSKL 2040 shows a very high projection (almost 10-times the projected population increase). While this is our observation of potential data inaccuracy, the key takeaway from this graph is that the absolute CO2 emissions drop to Zero by 2050!

In relation to the PTKL 2040's proposal for a low carbon Green Building Promotion Zone, we have submitted the following recommendations:

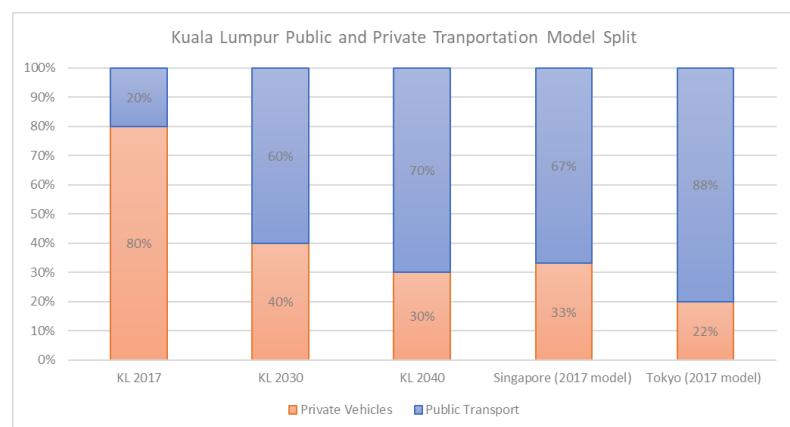
- i. Low Carbon Buildings to be defined to achieve at least 50% CO2e savings following the GreenPass definition.
- ii. Instead of a zone, the low carbon green building requirement should apply to all new commercial construction buildings from 2022.
- iii. The low carbon requirement should include all new construction buildings from 2024
- iv. The low carbon requirement should include all buildings (new and existing) and by 2030, 80% of the building stock must be low carbon.

3. Transportation

A key target for the transportation sector under the PSKL is to increase the percentage of overall public transport usage to 70% by 2040. The current rate of public transport usage in Kuala Lumpur is estimated to be only 20% as of 2017. The huge leap will only be made possible by expanding the coverage and connectivity of all transit lines in Kuala Lumpur and creating convenient infrastructure for alternative transportation modes such as cycling and low-carbon vehicles.

PSKL 2040 projects an increase by 211km length of rail lines equivalent to 128 new transit stations in Kuala Lumpur by 2040.

Under this sector, IEN has emphasized the need for better cycling and pedestrian infrastructure with an emphasis on last mile connectivity.



The PSKL and PTKL 2040 documents also cover elements of open space (target – 20sqm/person by 2040!) and biodiversity (100% preservation and maintenance of shady trees that meet specified criteria), among many other crucial elements that will make Kuala Lumpur a sustainable city by 2040. As DBKL continues to gather stakeholder feedback, our hope is that these continued discussions will result in a truly holistic and integrated PTKL 2040 document that will guide the ambitious targets set forth by DBKL.