

TAJUK PROJEK PENYELIDIKAN NAPREC BAGI TAHUN 2021, RMK-12

| BIL. | TAJUK | MATLAMAT KAJIAN | OBJEKTIF KAJIAN | HASIL KAJIAN | TEMPOH PROJEK | BIDANG |
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| 1) | Special economic zones (SEZ) in Malaysia | Land use planning issues and problems of the SEZs in Malaysia | <p>1. Mengkaji undang-undang “land use planning” dalam SEZs di Malaysia.</p> <p>2. Mengkaji isu undang-undang “land use planning” dalam SEZs di Malaysia</p> | A New Land Use Planning legal and regulatory framework of the SEZs in Malaysia | 12 bulan | Real Estate Laws and Policies (RELPE) |
| 2) | Polisi dan Kerangka Pembangunan Tanah Terbiar | Berdasarkan peruntukan undang-undang di bawah seksyen 115, 116 dan 117 Kanun Tanah Negara 1965, ia secara jelas menyatakan bahawa tanah yang dibiarkan kosong bagi sesuatu jangkamasa tertentu (2 tahun bagi tanah bangunan dan 3 tahun bagi tanah pertanian dan industri) akan dikenakan tindakan seperti disita yang diperuntukkan di bawah Seksyen 129 (4) (c), Kanun Tanah Negara 1965. Seksyen 129 (4) (c) ini telah memperuntukkan bahawa pihak Pentadbir Tanah boleh mengambil hak sementara bagi tanah itu sebagaimana yang diarahkan oleh Pihak Berkuasa Negeri atau dalam masa ketiadaan arahan itu, membuat suatu arahan mengisytiharkan tanah itu dirampas oleh Pihak Berkuasa Negeri. Walau bagaimanapun, tindakan tersebut jarang benar dilaksanakan Pihak Berkuasa Negeri, demi menjaga hubungan antara kerajaan dengan rakyat. Senario ini seterusnya menyaksikan wujudnya pelbagai isu | <p>1. Untuk mengenalpasti isu-isu pengurusan tanah terbiar yang dihadapi oleh kerajaan negeri dan agensi pelaksanaan berkaitan khususnya pihak berkuasa tempatan</p> <p>2. Untuk mengenalpasti dan menyemak program-program pembangunan tanah terbiar di seluruh negeri di Semenanjung Malaysia</p> <p>3. Untuk mengenalpasti persepsi dan maklum balas pihak-pihak berkepentingan terhadap kewujudan isu tanah terbiar dan program pembangunan berkaitan yang dilaksanakan.</p> <p>4. Untuk membangunkan kerangka polisi pengurusan dan pembangunan tanah terbiar</p> | Menghasilkan Kerangka polisi pengurusan dan pembangunan tanah terbiar peringkat kebangsaan | 12 bulan | Real Estate Laws and Policies (RELPE) |

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| | | berkaitan tanah terbiar yang sehingga kini telah mengundang pelbagai kesan negatif kepada masyarakat dan juga negara sama ada ianya menyentuh aspek sosial, ekonomi dan alam sekitar. | | | | |
| 3) | Legal Issues Arising from Private Lease Schemes (PLS) in Stratified Buildings | <ol style="list-style-type: none"> 1. The land office is unable to issue strata titles to a purchaser of a lease under (PLS) as the owner of a lease is not the registered proprietor under the National Land Code 1965 and Strata Titles Act. 2. In a PLS, who is to be the Management Corporation? 3. Can a purchaser of a lease sue the developer for not delivering the strata title to the purchaser? If yes, under what grounds? | <ol style="list-style-type: none"> 1. To examine provisions of the NLC on validity of a private lease scheme. 2. To examine the nature of rights and restrictions of a purchaser of a lease under the National Land Code 1965, Strata Titles Act 1985, Strata Management Act 2013. 3. To analyse liability of developers for failure to deliver strata titles to purchasers in PLS scheme. | Recommendation for legal reform to protect the interest of purchaser. | 12 Months | Real Estate Laws and Policies (RELP) |
| 4) | Joint Tenancy (Penyewaan Bersama) – An Exploratory Study | Mengkaji kesesuaian konsep “joint tenancy” di Malaysia. | <ol style="list-style-type: none"> 1. Meneliti konsep “joint tenancy” dalam konteks pembangunan tanah di Malaysia. 2. Mengenal pasti masalah dan isu yang berbangkit daripada menerimapakai konsep “joint tenancy” di Malaysia. | Mengenal pasti kesesuaian konsep “joint tenancy” dan mekanisme pengawalan di Malaysia | 12 bulan | Real Estate Laws and Policies (RELP) |

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| 5) | Kajian Mewujudkan Kerangka Piawaian Perumahan Berkualiti di Malaysia | <ul style="list-style-type: none"> Mengkaji semula Garis Panduan Perancangan Perumahan bagi mewujudkan piawaian perumahan yang berkualiti. Membuat “<i>benchmarking</i>” garis panduan perumahan | <ol style="list-style-type: none"> Membuat perbandingan garis panduan dan piawaian perumahan berkualiti. Membuat kajian penanda aras dengan negara lain. Mengumpul maklumat asas tentang kualiti keseluruhan perumahan. Membangunkan “framework” Piawaian Perumahan Berkualiti sama ada dari segi “standard” / reka bentuk /patuh syariah/fasiliti/ persekitaran. | Mewujudkan kerangka piawaian perumahan berkualiti untuk Malaysia. | 12 bulan | Real Estate Laws and Policies (RELP) |
| 6) | Isu dan permasalahan dalam pengeluaran hakmilik strata di skim pembangunan strata yang lama. | <p>Terdapat banyak skim pembangunan strata yang lama iaitu bangunan yang berusia lebih 30 tahun masih belum memperoleh hak milik strata. Faktor utama skim-skim berkenaan masih belum didaftarkan hak milik strata adalah disebabkan komplikasi perundangan seperti pemaju/tuan tanah bankrap atau pemaju/tuan tanah tidak dapat dikesan. Sementara itu juga, salah satu keperluan untuk pendaftaran hakmilik strata adalah perlu ada pelab lantai bangunan (as built plan). Oleh kerana pemaju.tuan tanah telah lama tiada maka pelan lantai tidak dapat diperolehi. Kos untuk membuat pelan lantai untuk keseluruhan skim pembangunan strata adalah amat tinggi. Ini akan membebankan pemilik unit. Terdapat isu juga berkenaan tanah adalah seperti, hakmilik tanah masih berstatus hakmilik sementara,</p> | <ol style="list-style-type: none"> Mengenal pasti isu-isu yang menyebabkan hak milik strata tidak dapat dikeluarkan Mengenal pasti penyelesaian yang dapat dijalankan bagi membantu skim pembangunan strata yang lama memndapatkan hak milik strata. | Membantu skim pembangunan strata yang lama untuk mendapatkan hak milik strata | 12 bulan | Real Estate Management & Services (REMS) |

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| | | pembangunan yang telah melanggar syarat nyata tanah dan lain-lain lagi | | | | |
| 7) | Management issues of older strata residences | The promulgation of apartments and condominiums in the Klang Valley could be observed to start in the early 1990s. These earlier strata residences are now mostly above 20 years old and can be said are at a mature stage. However, these older strata residences predate the Strata Management Act 2013 and its repealed predecessor Building and Common Property Act 2007. Being older developments that has been through 2 legal frameworks (STA & BCPA), how have these developments transition under the SMA? What is the proportion of in-house management (managed by Management Committee) against outsource (managing agents)? What are the management issues faced by these older strata residences? Buildings experience wear and tear as they age, and thus these group of older strata residences may be (quietly) facing maintenance and management issues that should be addressed now. To ignore this need is akin to burying one's head in the sand. | Research Aim: To study the management state of older strata residences in the Klang Valley. RO1: To determine the current management models of older strata residences (% inhouse vs outsource). RO2: To examine the management issues of older strata residences. RO3: To formulate a guideline for proper management of older strata residences. | A guideline that can help MC or property managers to anticipate future problems with older strata residences and to help current older strata residences to improve the quality of property management of their property | 12 months | Real Estate Management & Services (REMS) |

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| 8) | Pandemic and phenomenon - Reshapes Modern Office Resilient | Building a resilient workplace/workspace not only for pandemic threat but also towards sustainability (green building, disaster, climate change). | To identify sustainability factors that relate to build a new workspace To asses building needs for workspace from both technical and non-technical context To establish practical guideline of modern office resilient for sustainability | A cross boundary approach from both technical and non technical expert towards reshaping modern office resilient | 12 months | Real Estate Management & Services (REMS) |
| 9) | Pandemic and phenomenon - Reshapes Shopping Complex Resilient | Building a resilient workspace and shopping complex not only for pandemic threat but also towards sustainability (green building, disaster, climate change). | To identify sustainability factors that relate to build a new shopping complex To asses building needs for shopping complex from both technical and non technical context To establish practical guideline of shopping complex resilient for sustainability | A cross boundary approach from both technical and non technical expert towards reshaping shopping complex resilient | 12 months | Real Estate Management & Services (REMS) |
| 10) | Preparation of Budgeting Model for Strata Building - Sub Model for :- i. Residential ii. Office building, iii. Commercial iv. Landed v. mixed-use development | To prepare a standard format for expenses and budgeting purposes which is applicable for the industry. | 1. Identify the calculation for maintenance fees or service charges. 2. Identify the actual maintenance cost. 3. Perhaps cost saving | 1. Accurate calculation of costing acceptable to the market. 2. A standard template applicable to all. | 12 months | Real Estate Management & Services (REMS) |
| 11) | Impact of pre construction charges and statutory contribution on property market | To identify the impact of pre construction charges and statutory contribution on house price. | 1. Identify the pre construction charges and statutory contribution 2. Analysis on the change in value | To determine the factors impacting house prices | 12 months | Real Estate Management & Services (REMS) |

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| 12) | Building defects during and after DLP. | To prepare a guidelines or standards for authorities how to control the developer on building defects. | <ol style="list-style-type: none"> 1. Identify and avoid building defects 2. Understanding of building defects and their causes | Guidelines and standard to control building defects | 12 months | Real Estate Management & Services (REMS) |
| 13) | (Sub-thrust: Economic and Finance) Buying or Renting a House: Which is a better option? | Houses today are very expensive for young people to purchase particularly in the cities. For example, the average price of a 3-bedroom double storey house in general is between RM 450,000 and RM550, 000 in Kuala Lumpur while a 3-bedroom apartment is between RM 350-RM 450,000. Buyers must pay high down payment as well as monthly housing loan repayment leaving buyers with less money to spend on other more important goods and services such as food, education and health. Hence, Malaysians should consider renting rather than buying a house. Among other things, renting allows the person and his other family members to consume more and better-quality goods as well as increase their savings too. | <ol style="list-style-type: none"> 1. To development an application to establish an equilibrium point between buying & renting. 2. To assist prospect home buyers in decision-making process. <p>Data that researchers need to gather:</p> <ol style="list-style-type: none"> 1. Market value/Price 2. Rental 3. Duration of loan 4. Interest rate 5. Monthly repayment <p>Application to include colour indicators for various signalling.</p> | <p>The results identify specifically the situations in which the person is financially better off renting than buying a house.</p> <p>An application that helps homebuyers, especially young generation/first-time home buyers in arriving at informed decision.</p> | 6 months | Real Estate Development & Finance (REDF) |

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| 14) | (Sub-thrust: Development) Economic worth of implementing green wall and green roof as sustainable approach to mitigate Urban Heat Island (UHI) | The Urban Heat Island better known as UHI is a common phenomenon in urban cities worldwide. UHI occurs when a city experiences much warmer temperatures than surrounding countryside. The higher temperatures experienced in urban areas has enormous consequences to the environmental, health and finance of people living in cities. Rapid urbanization has exaggerated UHI as the process has enlarged the use of manmade materials (building and infrastructure) and amplified anthropogenic heat production due to high dependency on air conditioning system. UHI creates domino effect in energy chain whereby increase in surrounding air temperature leads to rise in building energy demand and eventually enlarge electricity expenses. It was reported up to 10% of electricity demand worldwide is used to compensate the effect of UHI. Furthermore, researches have proved electricity demand for space cooling increases up to 2% for every 0.6°C increment in the air temperature. Building roof and wall surfaces are dominantly exposed to solar irradiation whereby the surfaces temperature is relatively higher during daytime. This has magnified urban people's dependency on air-conditioning system for space cooling thus enlarged building energy consumption. Therefore, there is an urgency to combat UHI by introducing urban green infrastructure that provide | <p>1) To determine effect of Urban Heat Island (UHI) on energy consumption.</p> <p>2) To analyse economic performance of green wall and green roof in reducing Urban Heat Island (UHI) effect.</p> <p>3) To evaluate cost benefit of green roof and green wall implementation for building owner.</p> <p>Research approach by Case Study: Office Buildings in Putrajaya</p> | <p>1) Percentage of energy consumption affected by Urban Heat Island (UHI).</p> <p>2) Developed green roof and green wall economic performance model in reducing Urban Heat Island (UHI) effect.</p> <p>3) Cost benefit of green roof and green wall implementation for building owner.</p> | 6 months | Real Estate Development & Finance (REDF) |

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| | | <p>cooling effect for the building surfaces. Green wall and green roof are both promising innovative urban green infrastructures in combating this issue by removing heat from the air through the process of evapotranspiration and act as insulators for buildings thus reducing the energy needed for space cooling. Green roof and wall able to lower surface temperature up to 10°C and reduce electricity consumption up to 25%. Despite of the efficiency in combating UHI, the worth of implementing both green components remain unrevealed. Henceforth, this study motivates to quantify the cost and benefit of implementing green roof and green wall for the benefit of building owner. This research assist building owners in making decision to implement green roof and green wall in mitigating urban heat islands effect through lessening energy demand of a building.</p> | | | | |
| 15) | (Sub-thrust: Economic and Finance) Significance of heritage building towards revenue generating approach. | | <ol style="list-style-type: none"> 1. To establish a benchmark towards managing heritage building. 2. To determine value added income and revenue of the building. | | 12 months | Real Estate Development & Finance (REDF) |

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| 16) | Retail Property Price Index | Masih belum ada lagi index bagi retail (shop) | <ol style="list-style-type: none"> 1. To conduct profiling on shops sub-sector in the major states (KL, Selangor, Johor & Penang). 2. To develop sub-index of shops 3. To develop Malaysian Shop Price Index (MSPI) | Membolehkan pihak NAPIC membangunkan indeks rumah kedai diMalaysia. | 12 bulan | Real Estate Industry Analysis Studies (REIAS) |
| 17) | Office Rental Forecasting Model in Klang Valley | Masih tiada lagi office rental forecasting model di Malaysia. | <ol style="list-style-type: none"> 1.To identify the determinants & its weightages of Office Rents in Klang Valley. 2.To develop a scoring matrix for a forecasting model based on either a time-projection-model or a static-model. | Kajian ini untuk membantu pelabur dalam menentukan sesuatu projek yang boleh memberikan pulangan seterusnya boleh mengurangkan "overhang" di sesuatu kawasan. | 12 months | Real Estate Industry Analysis Studies (REIAS) |
| 18) | Purpose of study is to establish relationship between Foreign Direct Investment in Property Development on the housing market. | Impact of the Foreign Direct Investment in Property Development on the housing market. | <ol style="list-style-type: none"> 1. Identify the characteristics of FDI including the volume of investments involved at different significant selected study areas. 2.To evaluate the relationship between the FDI and the housing market (in terms of various parameters pertaining inter alia housing supply, house price, housing affordability and home ownership)Factors influencing FDI (encouraging and discouraging)in real estate should be identified and analysed. | To identify the segregate of the Foreign Direct Investment to the real estate in Malaysia. It is also help to predict the market accurately. | 12 months | Real Estate Industry Analysis Studies (REIAS) |

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| 19) | Property Development Costs: A Study on Key Cost Elements, its Issues & Management | To determine the actual cost elements in housing developments. | <ol style="list-style-type: none"> 1. To identify cost elements in each development stages from land banking, pre-construction, construction, post-construction until delivery of vacant possession; 2. To find out areas where cost discrepancies are most vulnerable for further mitigation through refinement of cost modelling approaches. 3. To identify areas where cost that has the best chance of being optimised through methods such as value mangement and the likes for a more efficient usage of resources. | The stakeholder can get accurate information on housing development costs. | 12 months | Real Estate Industry Analysis Studies (REIAS) |
| 20) | Unlocking the development potential of rural land area - Special reference to FELDA Settlement Schemes in Malaysia. | Masih tiada lagi kajian yang di buat bagi tanah FELDA untuk mengetahui potensi pembangunan yang memberikan pulangan "Highest and Best Use" ke atas tanah FELDA. | <ol style="list-style-type: none"> 1. To identify typical land areas that have development potential in FELDA Settlement Schemes. 2. To identify the types of feasible development themes/concepts that can generate sustainable income and higher return from the proposed development. 3. To propose a framework of development policies/schemes in achieving sustainable development goals for FELDA Settlement schemes. | Hasil kajian dapat mengetahui penggunaan tanah FELDA secara "Higest and Best Use" supaya memberikan keuntungan kepada pemilik dan negara. | 12 bulan | Real Estate Industry Analysis Studies (REIAS) |

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| 21) | The effects of COVID-19 Pandemic to the Malaysian Property Market: A study on Investment Properties' Performance & its Strategic Responses (PBO, Hotel and Retail) | Issues: How resilience of Malaysian property market to the pandemic and strategic planning for future | <ol style="list-style-type: none"> 1. To identify the significance of impact of the pandemic to the performance of investment properties 2. To identify historical trends of similar events in the past (e.g. SARS, Bird Flu, Spanish Flu) on investment properties' performance 3. To identify the causal relationship of spillovers effect of the affected property market to other economic sectors | Strategic implications to build resilience in property market | 9 Months | Real Estate Industry Analysis Studies (REIAS) |
| 22) | The impact on property market related to living environment due to disturbance/discomfort of public transportation development in Klang Valley. | There is an increasing number of above ground public transportation infrastructure, such as the MRT, LRT, etc in the Klang Valley. These public transportation infrastructure emits disturbance/discomfort such as noise, vibration, lighting, obstructed view etc that can have an adverse impact on real estate property prices/rentals. Previous research have not been carried out in this area since public transportation infrastructure in other cities have primarily been below- or on the ground. | <ol style="list-style-type: none"> i. To determine public awareness of living environment disturbance/discomfort related to the public transportation. ii. To identify the disturbance/discomfort of above-ground or under ground public transportation infrastructure; iii. To determine the disturbance/discomfort relationship between property and above-ground or under ground public transportation infrastructure; iv. To quantify the impact of disturbance/discomfort from above-ground or under ground public transportation infrastructure on property prices/rentals. | Quantification of the relationship between the environment disturbance/discomfort of public transportation infrastructure and property prices/rentals; | 9 months | Real Estate Valuation (REV) |

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| 23) | <p>Penilaian Harta/Sumber Alam/ Ekosistem</p> <p>Isu/ Topik Kajian :</p> <ul style="list-style-type: none"> • Penilaian harta/sumber alam/ekosistem dengan mengambil kira faktor-faktor kelestarian dari aspek alam sekitar, sosial, ekonomi dan nilai wang. • Penilaian karbon, penilaian nilai pemuliharaan ekosistem, nilai pemuliharaan spesis terancam. • Kaedah menentukan penilaian sumber alam yang dapat dijadikan sebagai petunjuk nilai wang bagi menentukan kelestarian sesuatu sumber alam. | <p>Untuk menghasilkan model penilaian yang mengambilkira faktor-faktor kelestarian serta dapat ditunjukkan di dalam nilai wang</p> | <ol style="list-style-type: none"> 1. Mengenal pasti faktor-faktor kelestarian dan kesan kepada penilaian 2. Mencadangkan kaedah penilaian dengan mengambil kira faktor-faktor kelestarian. | <p>Membentuk satu model/kerangka yang telah disahkan/dirangka untuk penilaian harta/sumber alam/ekosistem yang mengambil kira faktor kelestarian</p> | 9 bulan | Real Estate Valuation (REV) |
| 24) | <p>Penilaian Kadaran/ Rating Valuation</p> <p>Research Topics/issues:Lack of justification in determining the percentage rate of assessment to be levied</p> | <p>To justify the basis of determining the rates of assessment for various property types including plant & machinery in the local authority and to determine fixtures & fittings for rateing puposes.</p> | <p>To establish the asset life cycle cost model in relation to the rates of assessment adopted by local authority</p> <p>To determine fixtures and fitting including plant & machinery to be assess in rating and to determine</p> | <ul style="list-style-type: none"> • Asset life cycle model for local authority • Appropriate rates of assessment in local authority • Beside various of property, to determine types of fixtures and fitting including plant & | 6 months | Real Estate Valuation (REV) |

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| | by the local authority and item of fixtures and fitting to be determine for rate purpose | | which are to be included and not included. | machinery and which can be included and not included | | |