### 2050 Calculator

# What's happening in the 2050 Calculator community?

In the last quarter, we've seen the 2050 Calculator programme go from strength to strength as participating countries get ready to roll out completed Calculators in 2022. We were excited to see the launch of the **Vietnam 2050 Calculator** in late December of last year – the first country launch under the extension programme.

In this edition of our community newsletter, you can read more about the <u>Vietnam launch</u>, the <u>use of 2050 Calculators for energy and environmental</u> <u>education</u>, and our team's <u>country visit to Kenya</u> for a stakeholder workshop – it's great to see borders starting to open up again! We also bring you the latest highlights from <u>Calculators around the world</u>.

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## Vietnam launches 2050 Calculator update to fulfil its commitment to reduce greenhouse gas emissions

The Ministry of Industry and Trade (MOIT) of Vietnam and the British Embassy Hanoi have jointly launched an updated version of the 2050 Calculator energy and emissions model for Vietnam. Read more.

#### The use of system dynamics for energy and environmental education

The use of system dynamics as a learning tool for developing sustainable energy strategies and environmental education has advanced in recent years with the availability of new modelling software and webtools. Among the existing models, we highlight the online 2050 Calculators, which aim at simulating scenarios for greenhouse gas emissions, energy planning, sustainable land use, and food consumption. Read more.

### Kenya Carbon Emission Reduction Tool (KCERT) workshop and country visit

Members of the 2050 Calculator programme delivery team travelled to Nairobi in January for the second Kenya Carbon Emission Reduction Tool (KCERT) stakeholder engagement workshop, ahead of the tool's imminent launch. Read more.

#### Calculators around the world – updates

#### India

The team continue to update India's <u>IESS 2047</u> tool. Data is being updated in the new structure and the webtool is also being updated, in close collaboration with the consortium. We're also continuing to engage with the British High Commission Delhi and the project sponsor, NITI Aayog, to identify clear policy linkages and stakeholder engagement sessions for the revised model. All work is expected to be complete by August 2022.

#### Kenya

The Kenya team has had an excellent start to the year, and is on track to complete and launch the Kenya Climate Emissions Reduction Tool (KCERT) in the second quarter of 2022. The team continue to demonstrate strong commitment and proactivity, as evidenced during the



second stakeholder engagement event held at Downstream Partner, Strathmore University's campus in Nairobi in January. Over 60 delegates from across the public, private and civil society organisations attended the event to validate existing sector data and identify new datasets to finesse the model. We were thrilled to be able to attend in-person to support the stakeholder engagement session (<a href="read more">read more</a>). The team also supported the planning of KCERT's launch and identified additional activities to enhance the tool's awareness amongst Government of Kenya policymakers. We look forward to the launch of East Africa's first Calculator in the next few months.

#### Malaysia

In the last quarter, we've seen some personnel changes in Malaysia's Ministry of Environment and Water (KASA) which has slowed project progress somewhat – but we're in close communication with the delivery team and the Foreign Office to confirm KASA's continued support for the project.

#### Nigeria

It's been a busy quarter for the Nigeria Energy Calculator (NECAL) technical and leadership teams. In the run up to the launch of the model, a series of stakeholder engagements have taken place, including presentations to Energy Commission of Nigeria (ECN) management, the Ministry of Environment's Department of Climate Change Management and the National Steering Committee; as well as a second stakeholder workshop to call for evidence. More than 100 participants from ministries, departments and agencies, organised private sector, non-governmental organisations

and academia have been engaged in the process, and the technical team is now working to integrate the feedback received.



The NECAL launch is scheduled to take place on 21 March and promises to be an exciting milestone event!

#### The Philippines

We continue to support the Philippines team on sector-specific training to help them transition to the draft Excel model.

#### **Thailand**

The team has completed data collection and assumptions for transport, industry and land use sectors, and the data is now being reviewed and consolidated. Electricity generation sector data is being collected and the model structure of the building sector is being modified to make it suitable for Thailand's country context.

There's been good collaboration between the team and the Energy Policy and Planning Office (EPPO), Ministry of Energy. In February, we presented the progress of the project to the Director and Deputy Director of EPPO, and are incorporating feedback into the work plan and stakeholder consultations (planned for April). The ministry is considering using the Calculator for its policy planning strategy once complete.

#### Vietnam

The updated Vietnam Calculator – Vietnam2050Calculator4NDC – was launched on 20 December. Over 140 participants from government, industry, non-governmental



organisations and academia attended the hybrid online/in-person event, with a lively discussion taking place.

Tang The Hung, Deputy Director of Vietnam's Department of Energy Efficiency and Sustainable Development of the Ministry of Industry and Trade, said: "The completion of this version is timely and of particular significance after the Conference of the Parties on Climate Change COP26, opening up suggestions for scenarios of the reduction of greenhouse gas emissions in Vietnam's energy sector in the long term and towards net zero by 2050." (Read more).

You'll be able to access the webtool on the government's <u>National Energy</u> <u>Efficiency Programme (VNEEP) website</u> in the coming weeks.

#### **Conferences and events**

2050 Calculator International workshop

#### Date TBC

Our annual international conference will once again be held in the second half of the year. We're hoping to hold an in-person event this year (subject to travel restrictions being lifted), similar to our 2019 event in Windsor – which would be a great way to end the current programme and celebrate the Calculator teams' achievements. Details to follow.

#### **About us**

#### 2050 Calculator delivery partner

To deliver the 2050 Calculator programme, BEIS appointed a Mott MacDonald-led consortium as its delivery partner. Our consortium includes Mott MacDonald, Climact, Imperial College London and Ricardo.

We provide technical and capacity building support for governments and other stakeholders as they develop and use their Calculators; and we're responsible for disbursing UK Government funding to in-country Downstream Partners where required to ensure sufficient resources are available. Over the course of the programme, we're also working to build and connect the international Calculator community through conferences and other communication channels. We invite you to visit the <a href="2050">2050</a> Calculator website and to join us on <a href="LinkedIn">LinkedIn</a> for news, updates and discussion.

#### Delivery team highlights



Iman Ashraf Asmuni
Renewable Energy Engineer, Mott MacDonald
Iman is the delivery team's country manager for the
Malaysia 2050 Calculator programme. A renewable
energy engineer, Iman has seven years of professional
experience in the power generation sector, covering

various generation technologies, including solar PV, biomass, waste to energy, conventional thermal, combined cycle gas turbine, open cycle gas turbine, diesel engine power and pumped hydro storage. He has worked on over 1GW of solar PV projects within Malaysia and the South-East Asia region on energy yield assessments, solar resource studies, technical, contract and plant performance reviews, and levelised cost of energy calculations.



Noppakod Ariyaphonphiroon
Renewable Energy Engineer, Mott MacDonald
Noppakod is the delivery team's country manager for
the Thailand 2050 Calculator programme. She works
in the renewable energy sector as a renewable energy
engineer, focusing on both wind and solar PV projects.

Noppakod holds a master's degree in sustainable energy systems. She has internship experience as a chemical engineer in an oil and gas refinery, and as a research assistant in an oil and gas research centre. She was also a

thesis worker in one of the automotive research and development companies, focusing on hybrid electric vehicle technologies.

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