



# Phuket Sustainable Transformation Vision and Strategy

November 2023



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# Executive Summary

## 1. Pandemic impact and transformation strategies

The COVID 19 pandemic had a significant impact on the Thailand economy. Containment measures and the severe reduction in tourist numbers depressed the economy. Phuket tourism revenue fell very sharply with steep falls in domestic and foreign tourists and matching fall in revenue.

Break-through recovery and transformation strategies have been identified which address the short-term immediate needs of recovery and the development of a 'New Phuket' which is less vulnerable to economic shocks, addresses the urgent challenges of climate change and 'leaves-no-one behind'. to economic shocks, addresses the urgent challenges of climate change and 'leaves-no-one behind'.

These include: (i) balancing short and longer-term efforts; (ii) integrating the economic, environmental and social aspects of development to ensure the most effective use of resources; (iii) learning lessons from the achievements of the Phuket sandbox; (iv) strengthening public and private investment project planning to focus on priority investments; (v) increasing funding availability to enable the priority investments; and (vi) strengthened private investment marketing. Capacity development in strategic development visioning, investment project identification and prioritization and investment financing are also recommended.

## 2. Achieving the transformation strategies

### 2.1 Implementation Strategy #1 Investment project identification and prioritization

Potential investment projects can be identified and prioritized to address both short term and longer-term needs, especially the development of a 'New Phuket'. Different approaches for large and small investment projects are needed along with the application of criteria which ensure that investments are designed which contribute directly to addressing short term needs and the longer-term achievement of a 'New Phuket'.

## 2.2 Implementation Strategy # 2

### Funding and promoting the transformation strategy

The most pressing challenge is the lack of adequate funding for either short term investments, or, particularly, larger, longer-term investments which could underpin the more resilient 'New Phuket.' Innovative public and private investment funding are essential for short term recovery ('leave no-one behind') and longer-term development to support the "New Phuket" with a diversified economy to reduce vulnerability to shocks. The report assesses the size and scope of the challenge and identifies opportunities to increase the level of funding available.

State budget and provincial and municipal level public funding is likely to remain constrained, although there may be potential for enhancing local revenue collection. The main sources of additional funds will be: (i) the private sector, through investment in private initiatives (which achieve provincial objectives) and possibly through Public Private Partnerships; and (ii) capturing regional climate and green funds. Gaining access to regional climate and green funds would enable investment in Phuket's basic infrastructure, releasing provincial funding for other provincial priorities.

Attracting private sector investment and regional climate and green funds will require a range of investment promotion activities. These are recommended, including the identification and prioritization of flagship projects (flagship projects are designed to test and develop innovative approaches to project design and financing, which have the potential for wider application in the long term). It is recommended that flagship investment projects could be based on meetings, incentives, conferences and exhibitions (MICE) and health and wellness.

## 2.2 Implementation Strategy # 3 Capacity Building

A shared Vision for New Phuket can be achieved through the broad-based participation of stakeholders in a process that ensures ownership of the new vision by all parties.

Capacity building will be needed to: (i) enhance the capacity to develop public sector and private sector investment projects; (ii) strengthen the new PDP with the enhanced project identification and prioritization processes; (iii) create a flagship prototype project (or projects) relevant to the New Phuket vision and to experiment with innovative additional financing; (iii) continue supporting new tourism with lessons learnt from the Phuket Sandbox; and (iv) enable greater attention to vulnerable sectors and groups.

In particular, adequate and quality public infrastructure is a basic requirement for the New Phuket, and it needs huge investment with access to additional resources. Access of the private sector to additional funding sources can also be improved, including micro and small enterprises.

Financial management capacity building initiatives include: (i) financial analysis in project identification and prioritization and in financing plan preparation, fund-raising and PPP design and management; (ii) capacity building to provide a financial plan, especially for the PDP and POP in the public sector; (iii) joint ventures through Public Private Partnerships - a start could be made with a need assessment for solid waste management, marine pollution and waste water treatment; and (iv) enhancing the capacity of local entrepreneurs (MSMEs) to prepare loan requests adequately to access funds

Phuket could be a test bed for innovative tourism development planning and management and for innovative funding of investment projects. This gradual process could be built into the diversification of the growth engines of otherwise tourism reliant provinces.



# Policy Recommendations

## 1. Strategic Breakthroughs for Recovery and Transformation

- **Balanced short-term recovery and longer-term achievement of a 'New Phuket'** - whilst restarting the tourist economy in the short term (to 2027) is an obvious priority, achievement of a 'New Phuket' in the longer term (to 2030+), with gradual economic diversification is also imperative.
- **Building on the achievements of the Phuket Sandbox** - the Phuket Sandbox is a model for other tourist destinations to follow. Lessons learned from the Sandbox can assist the province's preparation for future pandemics and uncertainties.
- **Strengthened public and private investment project planning** – although with different processes, both public and private sector investment project identification and prioritization can be focused on achieving clear short and longer-term objectives. This requires consensus on the use of selection and prioritization criteria.
- **Increasing funding flow** - public resources need to be increased wherever possible, as do the private resources which are needed support the 'New Phuket' vision.
- **Strengthened private investment marketing** - marketing strategies for private investment project opportunities in Phuket should be refreshed – Phuket is a strong international brand.

## 2. Implementation Strategy # 1

### Project Identification and Prioritization

- A vision of 'New Phuket' is needed which includes gradual diversification of the economy along with a new approach to higher productivity tourism and installation of green infrastructure.
- Effective processes for project appraisal are required which are focused on the achievement of 'New Phuket': (i) full feasibility analysis for larger projects above a threshold cost; and (ii) a lighter analysis for smaller projects. (Larger projects will normally require full feasibility analysis leading to estimation of rates of return before selection, whereas a scoring system for smaller projects is appropriate).
- Contracting out feasibility studies means that public bodies do not need to have this capability but must nonetheless be capable of interpreting the results. Capacity for the selection of smaller projects is required.
- Monitoring investment project identification and prioritization efficiency would be helpful.

## 3. Implementation Strategy # 2

### Funding

- Wherever possible national and sub-national public sector funding to the Phuket economy should be enhanced.
- A Phuket Social Fund could be introduced to support short-term recovery efforts.
- Significant additional funds are most likely to be sourced from the private sector, but these are unlikely to relieve the funding gap in public investment. Potential sources of funds include local developers using commercial banks and in some cases PPP arrangements for funding projects that would otherwise be public investments
- Other source of funds could also be regional Climate Change funds. Use of these funds for infrastructure could release funds for other municipal level investments.
- Investment promotion is recommended. The development of flagship (bankable) projects and the preparation of an investment prospectus will enhance investment promotion for the much-needed projects and for Phuket as a whole.

## 4. Implementation Strategy # 3

### Capacity Building

Capacity-building to carry out the implementation strategies is recommended, with the aim to strengthen the Phuket Development Plan process. Capacity building support to the private sector for investment project appraisal is also recommended.

## 5. Next Step

### Transformation Flagship Projects

The preparation of concept notes for prototype bankable flagship projects based on MICE and health and wellness sectors is recommended..

# บทสรุปผู้บริหาร

## ผลกระทบจากการระบาดของโควิด-19 และกลยุทธ์การพลิกโฉมสำหรับจังหวัดภูเก็ต

การระบาดของโควิด-19 ส่งผลกระทบต่อเศรษฐกิจประเทศไทยอย่างมีนัยสำคัญ มาตรการกักกันและป้องกันโรคและการลดลงอย่างหนักของจำนวนนักท่องเที่ยว ส่งผลให้เศรษฐกิจซบเซา รายได้จากการท่องเที่ยวของจังหวัดภูเก็ตลดลงอย่างมากและรวดเร็ว โดยจำนวนนักท่องเที่ยวทั้งในประเทศและต่างประเทศที่ลดลงอย่างรวดเร็ว สอดคล้องกับการหดตัวของรายได้

รายงานฉบับนี้ได้ระบุถึงแนวทางใหม่ในการฟื้นฟูและพลิกโฉมจังหวัดภูเก็ต เพื่อส่งเสริมการฟื้นตัวของเศรษฐกิจในระยะสั้น ตลอดจนพัฒนาเพื่อบรรลุวิสัยทัศน์ “ภูเก็ตใหม่” ซึ่งสามารถรับมือกับความผันผวนทางเศรษฐกิจ จัดการกับปัญหาเร่งด่วนเรื่องการเปลี่ยนแปลงของสภาพภูมิอากาศ และ “ไม่ทิ้งใครไว้ข้างหลัง”

แนวทางดังกล่าว ประกอบด้วย (1) การฟื้นฟูในระยะสั้นและการบรรลุเป้าหมายในระยะยาวอย่างมีสมดุล (2) การคำนึงถึงการพัฒนาด้านเศรษฐกิจ สังคม และสิ่งแวดล้อมอย่างเป็นองค์รวม เพื่อจัดสรรทรัพยากรอย่างมีประสิทธิภาพมากที่สุด (3) การถอดบทเรียนจากความสำเร็จของภูเก็ต แซนด์บ็อกซ์ (4) การเพิ่มความเข้มข้นในกระบวนการวางแผนโครงการลงทุน ทั้งภาครัฐและภาคเอกชน เพื่อมุ่งเน้นการลงทุนที่มีความสำคัญต่อเป้าหมายการพัฒนา (5) การเพิ่มกระแสเงินทุน เพื่อสนับสนุนโครงการที่มีความสำคัญต่อเป้าหมายการพัฒนา และ (6) การปรับปรุงแผนการตลาดเพื่อส่งเสริมการลงทุนจากภาคเอกชน นอกจากนี้ ควรมีการเสริมสร้างศักยภาพ ทั้งในการกำหนดเป้าหมายตามวิสัยทัศน์ การเลือกสรรโครงการการลงทุน การจัดลำดับความสำคัญของโครงการการลงทุน และการจัดหาแหล่งทุนที่เหมาะสม



## การดำเนินการเพื่อพลิกโฉมจังหวัดภูเก็ต

### กลยุทธ์ที่ 1 – การเลือกสรรและการจัดลำดับความสำคัญของโครงการการลงทุน

การเลือกสรรและการจัดลำดับความสำคัญของโครงการการลงทุนต่างๆ ควรตอบโจทย์ทั้งในระยะสั้นและระยะยาว โดยเฉพาะอย่างยิ่งการพัฒนาตามวิสัยทัศน์ “ภูเก็ตใหม่” จำเป็นต้องมีแนวทางที่แตกต่างกันสำหรับโครงการลงทุนขนาดใหญ่และขนาดเล็ก รวมถึงการกำหนดหลักเกณฑ์ที่เหมาะสม เพื่อให้แน่ใจว่าโครงการการลงทุนนั้นถูกออกแบบมาเพื่อแก้ไขปัญหาในระยะสั้นโดยตรง และสนับสนุนการบรรลุเป้าหมาย “ภูเก็ตใหม่” ในระยะยาว

### กลยุทธ์ที่ 2 – การจัดหาแหล่งทุนและส่งเสริมกลยุทธ์การพลิกโฉมจังหวัดภูเก็ต

ปัญหาที่เร่งด่วนที่สุดคือการขาดเงินทุนที่เพียงพอทั้งสำหรับการลงทุนในระยะสั้น และโดยเฉพาะอย่างยิ่งการลงทุนในระยะยาวระดับที่ใหญ่ขึ้น ซึ่งอาจเป็นอุปสรรคต่อการบรรลุเป้าหมาย “ภูเก็ตใหม่” ซึ่งยืดหยุ่นต่อปัญหา การลงทุนจากภาครัฐและภาคเอกชนในรูปแบบใหม่เป็นสิ่งสำคัญต่อการฟื้นตัวในระยะสั้น (“ไม่ทิ้งใครไว้ข้างหลัง”) และการพัฒนาในระยะยาวเพื่อสนับสนุนให้ “ภูเก็ตใหม่” มีเศรษฐกิจที่มีความหลากหลายซึ่งเปราะบางน้อยลงต่อการเปลี่ยนแปลงอย่างรุนแรง รายงานฉบับนี้ประเมินขนาดและขอบเขตของปัญหา และระบุโอกาสในการเพิ่มเงินทุนที่มี

งบประมาณของรัฐบาลและเงินทุนภาครัฐในระดับจังหวัดและระดับเทศบาลน่าจะยังคงมีข้อจำกัด แม้ว่าอาจมีศักยภาพในการเพิ่มรายได้ภายในท้องถิ่น แหล่งเงินทุนเพิ่มเติมที่สำคัญได้แก่

(1) ภาคเอกชน ผ่านการลงทุนในโครงการริเริ่มของภาคเอกชน (ซึ่งบรรลุวัตถุประสงค์ของจังหวัด) หรืออาจกระทำผ่านความร่วมมือระหว่างภาครัฐและภาคเอกชน และ (2) เงินทุนในระดับภูมิภาค เช่น กองทุนภูมิภาคและกองทุนสีเขียว การเข้าถึงกองทุนภูมิภาคและกองทุนสีเขียวจะช่วยลงทุนในโครงสร้างพื้นฐานของจังหวัดภูเก็ต และทำให้สามารถใช้เงินทุนของจังหวัดสำหรับเรื่องอื่นได้

การดึงดูดการลงทุนจากภาคเอกชน และการเข้าถึงกองทุนในระดับภูมิภาค เช่น กองทุนภูมิภาคและกองทุนสีเขียว จำเป็นต้องอาศัยกิจกรรมการส่งเสริมการลงทุนที่หลากหลาย ซึ่งรวมถึงการเลือกสรรและการจัดลำดับความสำคัญของโครงการเรือธง (Flagship Projects) (โครงการเรือธงออกแบบขึ้นเพื่อทดสอบและพัฒนาแนวทางใหม่ๆ ในการออกแบบโครงการและจัดหาเงินทุน ซึ่งมีศักยภาพในการนำไปใช้อย่างกว้างขวางมากขึ้นในระยะยาว) โครงการเรือธงดังกล่าว ควรสนับสนุนอุตสาหกรรม การจัดประชุม การให้รางวัล การจัดการประชุมนานาชาติ และการจัดแสดงสินค้า (Meetings, Incentives, Conferences, and Exhibition—MICE sector) และอุตสาหกรรมส่งเสริมสุขภาพและความเป็นอยู่ที่ดี (health and wellness sector)

## กลยุทธ์ที่ 3 – การเสริมสร้างศักยภาพ

การสร้างวิสาหกิจเกิดใหม่ร่วมกัน ต้องอาศัยการมีส่วนร่วมอย่างกว้างขวางของทุกภาคส่วน ภายใต้กลไกที่ส่งเสริมให้ทุกฝ่ายเป็นเจ้าของวิสาหกิจใหม่และจำเป็นต้องมีการเสริมสร้างศักยภาพในด้านต่างๆ ดังนี้ (1) การจัดทำโครงการลงทุนทั้งสำหรับภาครัฐและภาคเอกชน (2) ส่งเสริมการดำเนินการของแผนพัฒนาจังหวัดเกิดฉบับใหม่ ด้วยการพัฒนากระบวนการเลือกสรรและจัดลำดับความสำคัญของโครงการการลงทุน (3) การสร้างโครงการต้นแบบหรือโครงการเรือธงที่เกี่ยวข้องกับวิสาหกิจด้วยวิสาหกิจเกิดใหม่ และการทดลองระดมทุนจากแหล่งเงินทุนใหม่ๆ เพิ่มเติม (4) การสนับสนุนการท่องเที่ยวใหม่ต่อไปโดยอาศัยบทเรียนที่ได้รับจากวิสาหกิจเกิดแซนด์บ็อกซ์ และ (5) การให้ความสนใจภาคส่วนและกลุ่มคนที่เปราะบางมากขึ้น

เนื่องจากโครงสร้างพื้นฐานสาธารณะที่เพียงพอและมีคุณภาพสูง เป็นสิ่งจำเป็นพื้นฐานสำหรับวิสาหกิจเกิดใหม่ และจำเป็นต้องได้รับเงินลงทุนจำนวนมากและการเข้าถึงทรัพยากรเพิ่มเติม จึงต้องอาศัยการเสริมสร้างศักยภาพเพื่อให้เข้าถึงแหล่งเงินทุนเพิ่มเติมได้มากขึ้นทั้งภาครัฐและภาคเอกชน รวมถึงวิสาหกิจขนาดเล็กและขนาดย่อม

การเสริมสร้างศักยภาพด้านการบริหารจัดการการเงิน ประกอบด้วยด้านต่างๆ ดังนี้ (1) การวิเคราะห์ทางการเงินในการเลือกสรรและการจัดลำดับความสำคัญของโครงการ และการจัดสรรเงินทุนสำหรับการเตรียมแผน การระดมทุน และการออกแบบและจัดการความร่วมมือระหว่างรัฐและเอกชน (Private Public Partnership—PPP) (2) การสร้างศักยภาพเพื่อจัดทำแผนทางการเงิน โดยเฉพาะอย่างยิ่งสำหรับการส่งเสริมแผนพัฒนาจังหวัดเกิดและแผนปฏิบัติการของภาครัฐ (3) การเสริมสร้างความร่วมมือระหว่างภาครัฐและภาคเอกชน - โดยอาจเริ่มต้นด้วยการประเมินความต้องการสำหรับการจัดการขยะมูลฝอยมลพิษทางทะเล และการบำบัดน้ำเสีย และ (4) เสริมสร้างความสามารถของผู้ประกอบการท้องถิ่น (MSME) เพื่อเตรียมการขอเงินทุนอย่างเหมาะสมเพื่อเข้าถึงแหล่งทุน

วิสาหกิจสามารถเป็นแหล่งทดลอง ทั้งในการพัฒนาและการจัดการการท่องเที่ยวโดยอาศัยนวัตกรรม และการจัดทำเครื่องมือการระดมทุนใหม่ๆ เพื่อสนับสนุนโครงการการลงทุนต่างๆ ทั้งหมดนี้จะช่วยสนับสนุนการเสริมสร้างเครื่องยนต์ทางเศรษฐกิจที่หลากหลาย ให้กับจังหวัดอื่นๆ ซึ่งแต่เดิมเคยพึ่งพาการท่องเที่ยวเป็นหลักอีกด้วย

# ข้อเสนอแนะเชิงนโยบาย

## 1. แนวทางใหม่ในการฟื้นฟูและพลิกโฉมจังหวัดภูเก็ต

- การฟื้นฟูในระยะสั้นและการบรรลุเป้าหมาย “ภูเก็ตใหม่” ในระยะยาวอย่างมีสมดุล ในขณะที่การฟื้นฟูเศรษฐกิจการท่องเที่ยวในระยะสั้น (ถึงปี 2568) เป็นเรื่องสำคัญอย่างเห็นได้ชัด การบรรลุเป้าหมาย “ภูเก็ตใหม่” ในระยะยาว (ปี 2573 เป็นต้นไป) พร้อมด้วยการสร้างกลไกทางเศรษฐกิจที่หลากหลาย อย่างค่อยเป็นค่อยไปก็เป็นเรื่องจำเป็นเช่นกัน
- การเรียนรู้จากความสำเร็จของภูเก็ตแซนด์บ็อกซ์ ภูเก็ตแซนด์บ็อกซ์เป็นแบบอย่างสำหรับแหล่งท่องเที่ยวแหล่งอื่นๆ บทเรียนที่ได้รับจากภูเก็ตแซนด์บ็อกซ์ จะช่วยในการรับมือกับการระบาดและความผันผวนต่างๆ ในอนาคต
- การเพิ่มความเข้มข้นในกระบวนการวางแผนโครงการลงทุนทั้งภาครัฐและภาคเอกชน แม้จะมีกระบวนการที่ต่างกัน แต่กระบวนการจัดทำและเลือกสรรโครงการการลงทุนทั้งของภาครัฐและเอกชนสามารถมุ่งเน้นไปที่เป้าหมายการพัฒนาทั้งระยะสั้นและระยะยาว ทั้งหมดนี้ ต้องอาศัยการเห็นพ้องต้องกันในหลักเกณฑ์การเลือกสรรและจัดลำดับความสำคัญของโครงการการลงทุนต่างๆ
- การเพิ่มกระแสเงินทุน - ต้องอาศัยเพิ่มทรัพยากรจากรัฐบาลเท่าที่ทำได้ เช่นเดียวกับทรัพยากรจากภาคเอกชน ซึ่งทั้งสองแหล่งนี้จำเป็นต่อการสนับสนุนวิสัยทัศน์ “ภูเก็ตใหม่”
- การปรับปรุงแผนการตลาดเพื่อดึงดูดการลงทุนจากภาคเอกชน - ควรทบทวนกลยุทธ์การตลาดเพื่อเพิ่มโอกาสที่ภาคเอกชนจะเข้ามาลงทุนในจังหวัดภูเก็ต โดยอาศัยความเป็นแบรนด์ระดับโลกที่เข้มแข็ง



## 2. กลยุทธ์ที่ 1 – การเลือกสรรและการจัดลำดับความสำคัญของโครงการการลงทุน

- วิสัยทัศน์ “ภูเก็ตใหม่” เป็นสิ่งที่จำเป็น ซึ่งประกอบด้วย การสร้างกลไกทางเศรษฐกิจที่หลากหลาย ค่อยเป็นค่อยไป พร้อมกันกับการใช้วิธีใหม่เพื่อยกระดับผลิตภาพของภาคการท่องเที่ยว และการสร้างโครงสร้างพื้นฐานที่เป็นมิตรกับสิ่งแวดล้อม
- กระบวนการประเมินโครงการที่มีประสิทธิภาพ เป็นสิ่งที่จำเป็นต่อการมุ่งสู่วิสัยทัศน์ “ภูเก็ตใหม่” ประกอบด้วย การวิเคราะห์ความเป็นไปได้ (feasibility analysis) ฉบับสมบูรณ์สำหรับโครงการใหญ่ ที่เกินขอบเขตของต้นทุน (threshold cost) และการวิเคราะห์ที่ละเอียดน้อยกว่าสำหรับโครงการขนาดเล็ก (โดยปกติแล้ว โครงการขนาดใหญ่จำเป็นต้องมีการวิเคราะห์ความเป็นไปได้แบบสมบูรณ์ ซึ่งจะแสดงให้เห็นถึงอัตราผลตอบแทนโดยประมาณก่อนเลือกโครงการ ในขณะที่ระบบการให้คะแนนนั้นเหมาะสมสำหรับโครงการขนาดเล็ก)
- การทำสัญญาจ้างบุคคลภายนอกทำการศึกษาความเป็นไปได้ของโครงการหมายความว่าหน่วยงานรัฐยังไม่จำเป็นต้องมีศักยภาพในเรื่องนี้แต่ต้องสามารถวิเคราะห์ผลลัพธ์การศึกษาได้ อย่างไรก็ตามหน่วยงานรัฐจำเป็นต้องมีศักยภาพในการวิเคราะห์และเลือกโครงการขนาดเล็ก
- การตรวจสอบการเลือกสรรและการจัดลำดับความสำคัญของโครงการการลงทุนที่มีประสิทธิภาพ จะเป็นกลไกช่วยสนับสนุน

## 3. กลยุทธ์ที่ 2 – การจัดหาแหล่งทุน

- ควรมีการขยายฐานทรัพยากรทางการเงินของภาครัฐ ทั้งในระดับประเทศและระดับท้องถิ่น ในจุดที่สามารถทำได้
- การจัดตั้งกองทุนเพื่อสังคมสำหรับภูเก็ตสามารถช่วยส่งเสริมการฟื้นฟูในระยะสั้น
- แหล่งทุนเพิ่มเติมส่วนใหญ่มักจะมาจากภาคเอกชน แต่ก็ยังไม่เพียงพอต่อความต้องการการลงทุนในโครงการภาครัฐ แหล่งทุนที่สามารถใช้เพิ่มเติมได้ รวมถึงแหล่งทุนจากผู้รับเหมาก่อสร้างซึ่งอาศัยเงินทุนจากธนาคารพาณิชย์ และในบางกรณี อาจใช้ความร่วมมือระหว่างภาครัฐและเอกชน (Public Private Partnership—PPP) สำหรับโครงการต่างๆซึ่งแต่เดิมต้องอาศัยการลงทุนจากภาครัฐฝ่ายเดียว
- กองทุนภูมิอากาศในระดับภูมิภาค สามารถเป็นแหล่งทุนเพิ่มเติม การใช้แหล่งทุนเหล่านี้ในการลงทุนโครงสร้างพื้นฐานอาจช่วยให้สามารถนำแหล่งทุนที่มีไปใช้สนับสนุนการลงทุนอื่นๆในพื้นที่
- ควรมีการส่งเสริมการลงทุนเพิ่มเติม การจัดทำโครงการ “เรือธง” ที่สามารถสร้างผลตอบแทนในการลงทุนตลอดจนการจัดทำหนังสือชี้ชวนจะช่วยดึงดูดการลงทุนทั้งสำหรับโครงการต่างๆที่จำเป็นและสำหรับจังหวัดภูเก็ตโดยรวม

## 4. กลยุทธ์ที่ 3 – การเสริมสร้างศักยภาพ

ควรมีการเสริมสร้างศักยภาพในการดำเนินการตามกลยุทธ์ต่างๆดังกล่าว เพื่อส่งเสริมการดำเนินการตามแผนพัฒนาจังหวัด นอกจากนี้ ควรเสริมสร้างศักยภาพของภาคเอกชนในการประเมินโครงการการลงทุนอีกด้วย

## 5. การดำเนินการขั้นต่อไป: การจัดทำโครงการ “เรื่อรง” เพื่อการพลิกโฉมจังหวัดภูเก็ต

ควรมีการจัดเตรียมแนวคิดการจัดทำโครงการการลงทุน (concept note) สำหรับโครงการ “เรื่อรง” ที่สามารถสร้างผลตอบแทนในการลงทุน โดยอิงจากอุตสาหกรรมการจัดประชุม การให้รางวัล การจัดการประชุมนานาชาติ และการจัดแสดงสินค้า (Meetings, Incentives, Conferences, and Exhibition-MICE sector) และอุตสาหกรรมส่งเสริมสุขภาพและความเป็นอยู่ที่ดี (health and wellness sector)

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# 1. Pandemic impact and recovery



# 1. National impact and policy response

1. The COVID19 pandemic had a significant impact on the economy of Thailand. With a large tourism sector and intensive global supply chain links, Thailand's economy was very vulnerable. Gross domestic product (GDP) contracted 6.1 per cent in 2020, down from the pre-pandemic projection of 3 per cent growth.<sup>1</sup> During the pandemic, it was estimated that 3.1 million workers lost their jobs, and 5.2 million people fell back into poverty.
2. The report of the World Bank's Thailand Economic Monitor<sup>2</sup> noted that in March and April 2020, the cabinet approved three phases of a COVID-19 relief and recovery package, which together amounted to 2.2 trillion baht, or 12.9 per cent of GDP. The fiscal response centered on a Parliament-approved emergency decree<sup>3</sup> – in force until the end of FY2021 – to borrow up to 1 trillion Baht (about 6 per cent of GDP) off-budget<sup>4</sup> to fund cash transfers, the medical response, and economic and social rehabilitation in the aftermath of COVID-19<sup>5</sup>.
3. Much of the remainder of the program consisted of measures implemented by the Bank of Thailand and Specialized Financial Institutions to reduce liquidity constraints affecting households and businesses and to preserve jobs. Of the 555 billion baht authorized to be spent on cash transfers and relief measures for households, farmers, and entrepreneurs, around 365 billion baht has been programmed, of which 300 billion baht (1.8 per cent of GDP) was disbursed by December 2020.
4. The government allocated US\$12.9 billion for economic and social recovery programs and projects. Projects in FY 2021 were financed by government internal funds and/or by development partners. The government identified 6 priority areas to support<sup>6</sup> :
  - Smart farming<sup>7</sup> ;
  - Industry, trade, and investment;
  - Responsible tourism and services;
  - Economic recovery at community level;
  - Projects to boost domestic consumption; and
  - Infrastructure development
5. The FY2021 budget included increases in both revenues and spending. Spending was budgeted to increase to 3,300 billion baht (including debt amortization of 99 billion baht), up 12 per cent from FY2020, while revenues were projected to rise to 2,677 billion baht, also up 12 per cent in nominal terms. By functional classification of spending, housing and community amenities, health, and social protection saw the biggest gains in budget allocations relative to FY2020. The government also budgeted additional spending of 40 billion baht for alleviating the impact of COVID in FY2021, in addition to the implementation of the 1 trillion-baht package authorized in the previous year.

1 International Monetary Fund. 2020. World Economic Outlook: Chapter 1: The Great Lockdown. Washington, D.C. The projection of the Bank of Thailand was -5.3per cent.

2 World Bank Group. 2021. Thailand Economic Monitor: Restoring Incomes; Recovering Jobs. World Bank, Bangkok.

3 Government of Thailand. 2020. Emergency decree authorizing the Ministry of Finance to raise loans to remedy and restore the economy and society affected by the COVID-19 pandemic. B.E.2563 (2020). Bangkok.

4 Not included in on-budget public debt measures

5 In addition to the 1trn baht loan for COVID response and rehabilitation, the Ministry of Finance, with Cabinet endorsement, will issue bonds and/or sign the loan contract for additional 500 billion baht of government borrowing by end of September this year, as the additional loan disbursement is planned to be implemented throughout fiscal year 2022.

6 As at June 2020 31,801 projects, amounting to US\$23.4 billion, were submitted to the Loan Fund Disbursement Consideration Committee for consideration.

7 <https://internetofthingsagenda.techtarget.com/definition/smart-farming#:~:text=Smart%20farming%20is%20a%20management,monitoring%2C%20automating%20and%20analyzing%20operations>

## 2. Lessons learned from the pandemic in Phuket

6. UNDP undertook a COVID impact analysis in Phuket in the course of 2020<sup>8</sup>, focusing on the initial and subsequent economic loss, the impact on local businesses, employment, social and economic aspects, and vulnerable individuals. The impact analysis noted that the pandemic set back Phuket's economy more than other provinces due to its heavy reliance on the tourism sector. The role of manufacturing industries and agriculture in Phuket had already declined from 20 per cent in 1995 to only 5 per cent in 2018, creating an economy which was vulnerable to any event which put the tourism industry at risk.
7. The report noted that Phuket's economy is not the only tourism-oriented province in Thailand, but it is the least diverse<sup>9</sup> and the most foreigner-dependent. It was also very successful in terms of growth rate, which was above national levels in recent years, whilst at the same time experiencing inequality below national levels.<sup>10</sup> But the pandemic left Phuket's labour force almost entirely out of work: the unemployment rate reached the record high 9.9% in Q1 2021 and 12.71% of employment were classified as semi-unemployment (working less than 24 hours per week)
8. In 2019 (Q1 and Q2) Phuket tourism revenue was 245,460 million Baht and in 2021 (Q1 and Q2) the tourism revenue was 5,484 million Baht, just 2.23% of the 2019 total revenue. Comparing the same periods, Thai domestic tourists in 2021 contributed 20.39% of the revenue earned by Thai domestic tourists in 2019. Foreign tourists in 2021 earned just 0.07% of the revenue earned by foreign tourists in 2019. The number of tourists in 2019 (Q1 and Q2) was 7,435,593 and the number of tourists in 2021 (Q1 and Q2) was 375,519.
9. The analysis confirmed that the most vulnerable are hit the hardest. Informal enterprise and informal employment are commonplace in Phuket, with those in informal jobs poorly served by social protection and so more vulnerable to the shocks from the pandemic. Migrant labour is also widely used, with migrants enjoying little or no protection – many have now returned home. Labour productivity is assumed to be low, particularly in informal jobs serving low-end tourism, which are accordingly poorly paid. The pandemic has also had the effect of worsening gender inequality
10. The impact analysis also recorded that the incomes of 46 per cent of respondents had diminished at least by half and that most residents do not have the financial resilience to cope with this loss of income. 73 per cent of Phuket residents indicated that they had sought alternative employment or business strategies. Most entrepreneurs reported a decline in year-on-year revenue during an intense period of the pandemic (March-May 2020). Even after the initial easing of restrictions, most entrepreneurs in Phuket still reported revenue decline. About one fifth of business respondents reported that their businesses were officially closed due to the pandemic
11. The impact study has identified vulnerable groups, for example, sex workers and rural migrants. These groups report a complete loss of income due to sudden unemployment or loss of their tourist-patronized income. They experience severe economic hardship as there are few alternative job opportunities. This economic devastation has major health impacts.
12. Understanding of the full impact of the pandemic nationally is still imperfect and across the world efforts are being made to enhance understanding to counter socio-economic impacts whilst emphasising the importance of a whole-of-society and whole-of-government response<sup>11</sup>.

8 "COVID-19 and the future of Phuket economy" Output 2: Socio-Economic Impact Assessment on the Tourism Sector in Phuket, Project Title: COVID-19 Socio-Economic Impact Assessment, for the United Nations Development Program (UNDP), Submitted by Asst. Prof. Dr. Kullada Phetvaroon, Dr. Sukampon Chongwilaikasaem, Asst. Prof. Dr. Pornthep Benyaapikul, Dr. Thammasin Ingviya, M.D., Asst. Prof. Dr. Tatiyaporn Jarumaneerat, Dr. Vipawee Dumme, Eva Ayaragarnchanakul and Prof. Dr. Virasakdi Chongsuvivatwong, M.D. (Project advisor)

9 Although with spill-overs to other sectors, such as to the food and beverage industries

10 GDP growth rate in real terms was 8.1 per cent and 5.1 per cent in 2018 and 2109 respectively in Phuket and 4.2 per cent and 2.3 per cent for the Kingdom as a whole in the same years. The Gini coefficient in 2015 was 0.305 in Phuket and 0.429 in the Kingdom as a whole, reflecting a greater degree of income inequality nationally than locally in Phuket.

11 UN Secretary-General António Guterres set the tone for UN's approach with his Shared Responsibility, Global Solidarity plan

## 3. Phuket development components

### Economic diversification

13. As noted in the impact analysis recommendations, a diversified economy is less reliant on one set of economic activities, and this increases economic resilience. A diversified economy creates a sustainable cycle of economic activity where businesses continually feed off of one another and grow larger as the economy grows. As more and more businesses open their doors, it leads to the growth of supporting industries.
14. The Ansoff Matrix is a business planning tool which aids businesses in determining product and market growth. Growth risk is usually determined by focusing on whether the products are new or existing and whether the market is new or existing. This kind of analysis is applicable to Phuket as it prepares its next Provincial Development Plan and considers how to diversify and grow its economy. The Ansoff Matrix has four alternative marketing strategies: market penetration, product development, market development and diversification.
15. Market Penetration strategy – with this strategy there could be further exploitation of Phuket's existing tourism market without necessarily changing what Phuket's tourism industry offers. This would be possible through the use of promotional methods, adopting various pricing policies that may attract more tourists. The risk involved is the least of the four marketing strategies since Phuket is already familiar to tourists and the tourist industry and is an established market. But the pandemic has revealed that the existing tourism industry in Phuket is highly vulnerable to economic shocks of the kind created by the pandemic and this strategy alone would leave Phuket vulnerable to further shocks. Nor is it certain that the existing tourism product and market is sustainable post-pandemic as international travel and tourism may be slow to recover and, with climate change also being a factor, it may never recover.
16. A Product Development growth strategy usually involves the modification of an existing product (tourism extended to health tourism, MICE, education services in Phuket, as examples) to be promoted in the existing market. This strategy reduces vulnerability as it segments the Phuket tourism market and each segment of the market will be affected differently by post-pandemic and climate change constraints.
17. In a Market Development strategy, Phuket would promote itself as a tourist destination to new markets for tourism. There are various approaches to this strategy, which include: new or re-focused geographical markets, which may require new product packaging and pricing policies. Market Development is a riskier strategy than Market Penetration as new markets may have unknown constraints, especially post-pandemic and as international efforts to ensure climate change mitigation and adaptation become more effective.
18. Diversification - there are two types of diversification, related diversification and unrelated diversification. In related diversification, the business remains in the existing industry - for example, Phuket may retain its core tourism business (perhaps aiming at the high-end of the existing market) whilst diversifying its tourism industry into medical tourism, MICE and educational services, as suggested above for the case of Phuket. In unrelated diversification, there is usually no previous industry or market experience. The unrelated diversification growth strategy involves marketing or selling new products to new markets at the same time. Related diversification is less risky than unrelated diversification but, in both cases, a new product is being offered to a new market.
19. A recommended route to a more secure Phuket economy is to focus initially on Product Development – as recommended by the Phuket Chamber of Commerce in most of its proposals, as explained below. In the short to medium term this offers slightly more resilience against economic shocks. It is recommended that gradually and within 10 years, the diversification is strengthened by taking the selected product developments into new markets, achieving much more resilience.

20. Even before the pandemic, the Phuket Chamber of Commerce and leading Phuket business associations had issued a White Paper on the future of the Phuket economy<sup>12</sup>. This suggested that, in the medium term, there should be economic diversification and the proposals included<sup>13</sup>:
- **Marina linked economic activities**, including ship repair and servicing and crew training
  - **International education services** with associated growth of real estate activity from the long-term stay of migrant family and increase expenditure for consumer goods
  - **Health and wellness** with further establishment of medical / wellness facilities, specialized food production and strong links with tourism activities
  - **Tuna export** with links to refrigeration and transportation services
  - **Phuket gastronomy** with links to specialized food production (including setting production standards), food exports.
  - **Sports and events** with strong support links to tourism and food production and event production and management
  - **SMART city**
  - **Meetings, incentives, conferences, and exhibitions**, or Meetings, Incentives, Conferences, and Events (MICE) – an important industry because MICE visitors are usually on business and often spend more than leisure travellers.
21. All but one of the proposals were included in the 2018-2022 term Phuket Development Plan (PDP) (please refer to Figure 1) and it is suggested that their prioritization is carefully considered. Prioritization could be linked to the recommendations of the impact analysis, a review of investment project imperatives (particularly infrastructure), and the nationally determined Sustainable Development Goals (SDGs), the aim being to enable not only short-term recovery, but also economic, environmental, and social sustainability.
22. It is noted that, except for the tuna fishing proposal, most of these sectors are still based on tourism, with continued, although mitigated, vulnerability to economic shocks. In addition to the gradual diversification recommended in paragraph 25, an additional measure could be to aim at high-end tourists (regional and domestic). This implies identifying the type of tourist that suits the destination best rather than trying to attract everyone.
23. Tourism will of course remain a core economic activity but could perhaps be more productive as quality and labour productivity increase. Taking Phuket tourism upmarket would support this. Whilst the Thai GDP per capita is about US\$7,800 per capita, the OECD GDP is about US\$40,000 per capita. To focus on this market would implicitly mean not only fewer domestic Thai tourist but also fewer regional tourists. This is of course quite a contentious proposition since the government wants to rely more heavily on domestic demand. In addition, there is also a climate change risk here – taking a broad perspective reduction in the number of long-haul flights is preferable, to reduce emissions.

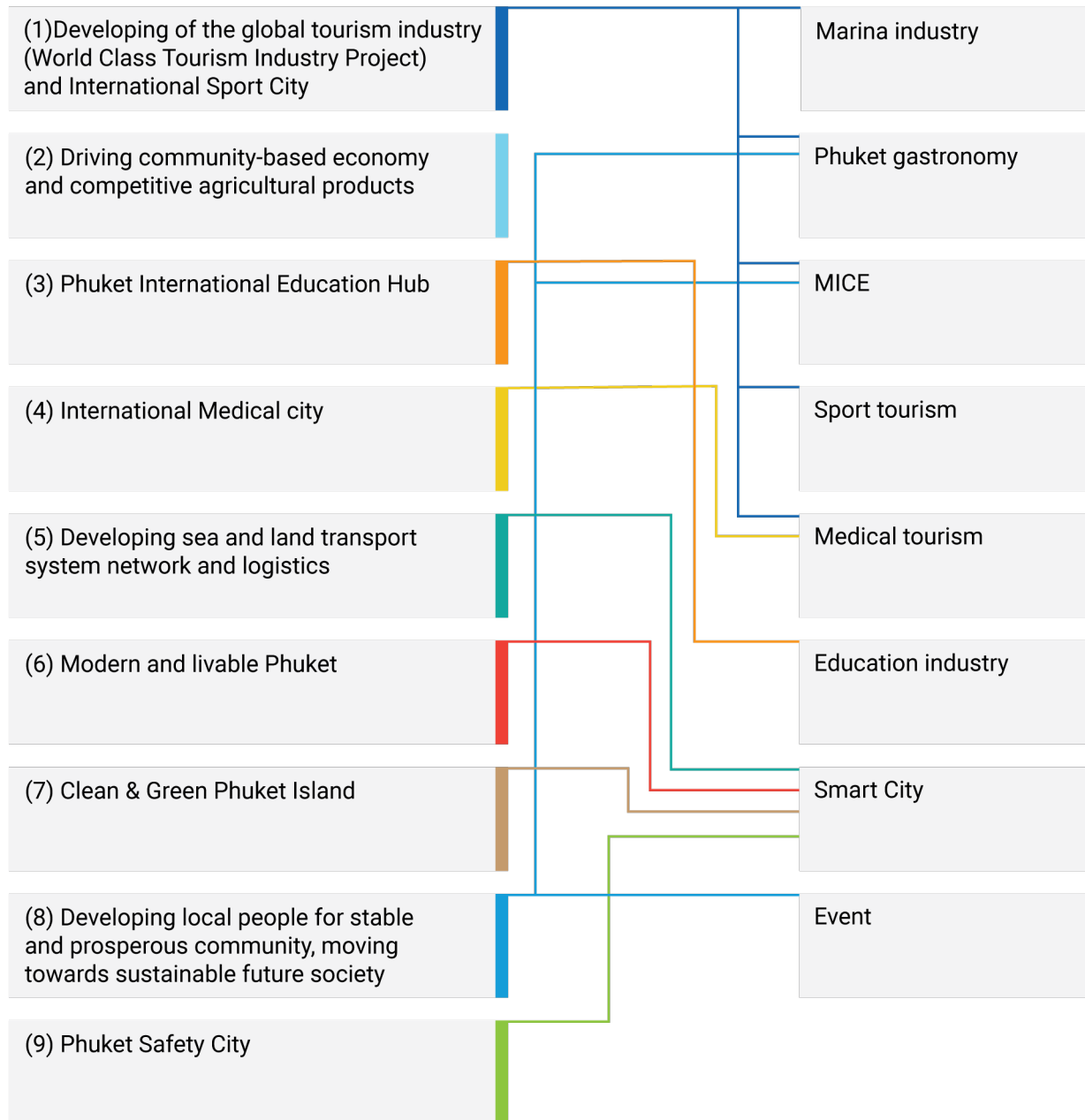
12 <https://www.thephuketnews.com/back-to-basics-tourism-urged-to-restart-the-economy-76531.php>

13 Please refer to Appendix C for more details

**Figure 1: PDP Strategies and Chamber of Commerce proposals**

**Phuket Development Plan  
(2018-2022)**

**7+1 industries  
(in white paper)**



## Inclusivity

24. As noted in the impact analysis, the provision of employment opportunities and financial assistance to all groups is needed to mitigate social problems. People with disabilities, indigenous people, rural migrants, the elderly, and sex workers find it harder to find a replacement job and relied heavily on social-safety nets.
25. Diversification also includes a mix of small and medium sized businesses.<sup>14</sup> Industries such as sustainable tourism<sup>15</sup>, healthcare and education provide a solid foundation that support medium-sized businesses. In turn, these both provide anchors that support smaller businesses. Each tier supports one another and provides the services and goods the others depend upon. As the economy expands and more businesses within each tier open their doors, the stronger this support network becomes. As the network grows and expands it creates additional room for similar sized businesses to find a niche within the economy that needs to be filled. This can help small businesses grow, benefiting the most vulnerable. This concentration and agglomeration are an established basis for growth and employment.
26. Inclusivity can be a benefit of integrated economic, environmental and social planning and budgeting. The pandemic crisis presents opportunities to solve current problems in Phuket of traffic congestion, limited choice of public transportation, deteriorating conditions of natural resources and high cost of living – addressing these challenges improves Phuket liveability for all. Inclusivity also needs to be addressed in the opening-up of planning and budgeting processes.

## Climate change

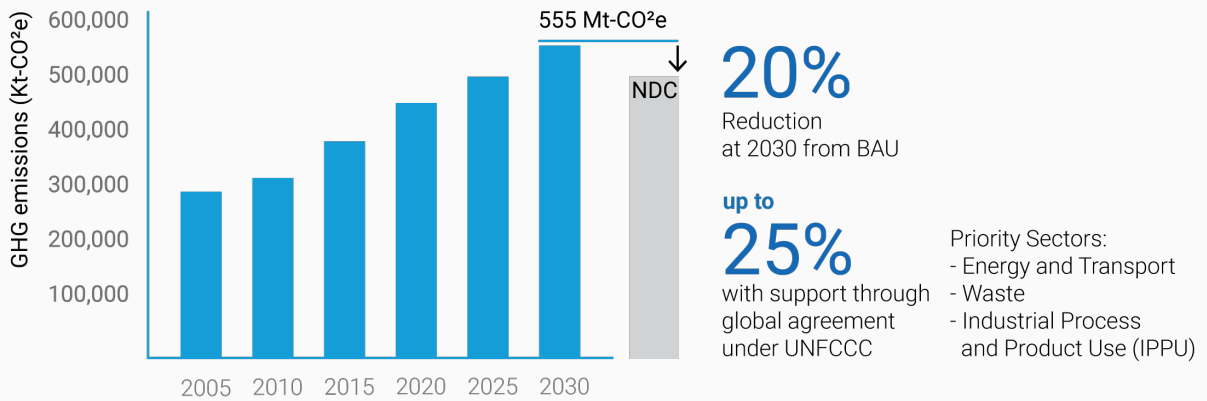
27. Thailand has ratified major climate change related agreements<sup>16</sup> and has established nationally determined contributions and a national adaptation plan as shown in the Figures 2 and 3.
28. It is essential that climate change considerations run through PDP and pandemic recovery strategies to support the resilience of the natural environment and Phuket's communities. Climate change mitigation and adaptation should continue to be central to each of the PDP's themes and policies. To properly address climate change, a coherent, joined-up approach encompassing development standards, transport and infrastructure and healthy eco-systems is required.
29. Achieving net zero in Phuket requires reductions in emissions from all sources and it should be the intention of the PDP to drive these down as far as possible (improved building standards, increased renewable energy generation, green transport as examples). The PDP could also seek to establish a framework in which environmental enhancements can be directed to where they can be most effective in reducing the impacts of climate change and offsetting any residual carbon emissions that cannot be eradicated at source.

14 Large businesses are usually defined as 250+ employees. There will be few of these in Phuket.

15 'Sustainable' tourism requires that the whole global supply chain and its distributive impacts is considered.

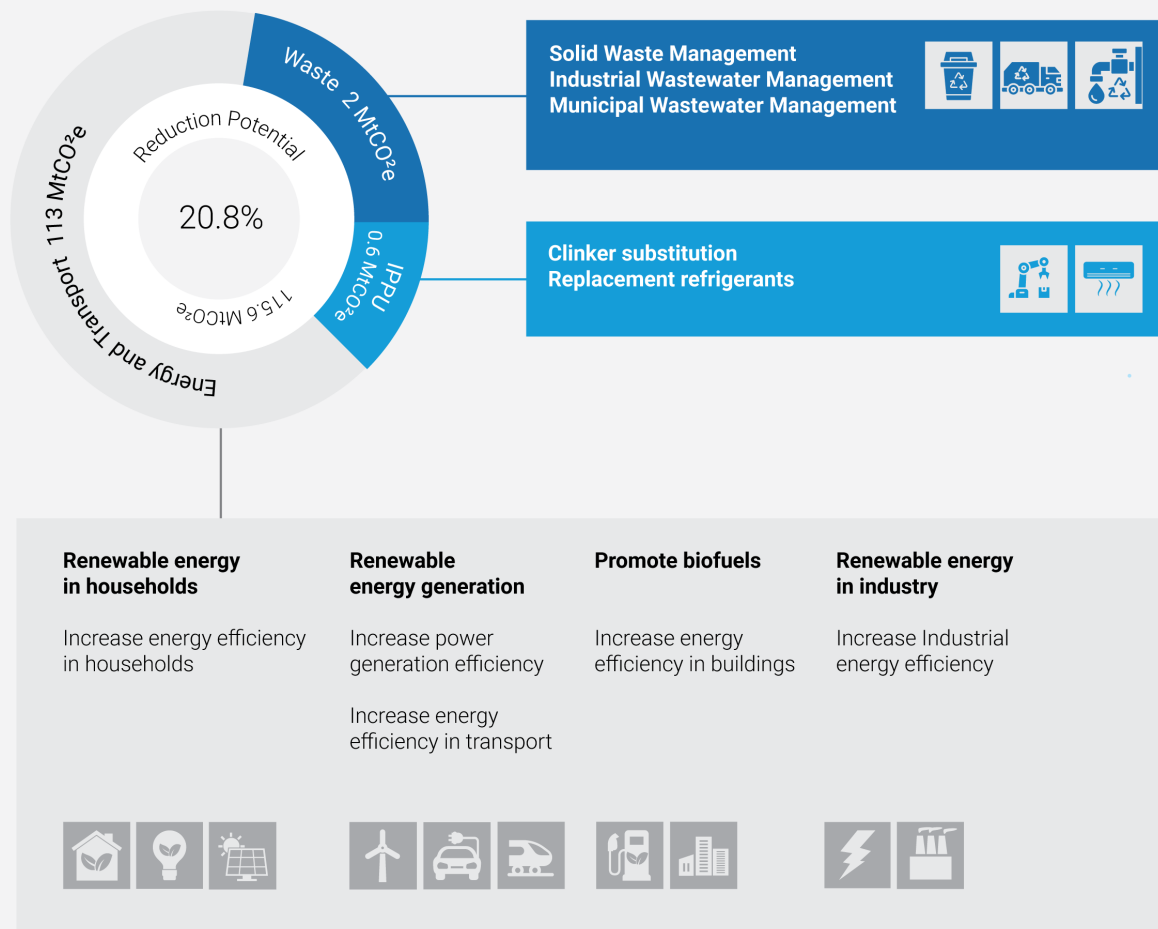
16 UNFCCC (1994), Kyoto Protocol (2002), and Paris Agreement (2016)

**Figure 2: Thailand's Nationally Determined Climate Change Target**



**Figure 3: Thailand's NDC Roadmap on Climate Change Mitigation**

**Thailand NDC Roadmap on Mitigation (2021-2030)**



30. It is important that the PDP addresses climate change and the transition to a low carbon future balanced with adaptation to climate impacts. For Phuket, coral bleaching, coastal erosion and sea level rise are high priorities. The approach should use the Bio-Circular-Green development model<sup>17</sup> promoted by Thailand as part of the recovery and transformation efforts. The BCG Economy Model Strategic Plan, 2026-2021, consists of four strategies:
- **The first strategy** aims to create sustainability of resource bases and biodiversity through balancing conservation and utilization.
  - **The second strategy** involves community empowerment and the development of the local economy through capital, resources, identity, creativity, and modern technology. Area-based potential is used, based on the principle of «exploding from within,” with an emphasis on making use of biodiversity and cultural diversity to increase the value in production chains and services.
  - **In the third strategy**, industrial development under the BCG economy model is deployed. Knowledge, technology, and innovation is adopted to enhance production efficiency. The «less is more» environmentally friendly production system is emphasized.
  - **The fourth strategy** seeks to enhance resilience in the face of global change to mitigate impacts. Science, technology, and innovation is adopted to increase the potential of communities and entrepreneurs. The forms of production and services are adjusted in response to the market demand, while «green growth” will be promoted.
31. Apart from biodiversity and cultural diversity, the development of the BCG economy model focuses on four sectors: (i) agriculture and food; (ii) medical services and wellness; (iii) bio-energy, bio-materials, and bio-chemicals; and (iv) tourism and creative economy.
32. There are a multiple businesses and organizations<sup>18</sup> driving innovation in the green economy and many more involved in the supply chains and supporting business sectors. It nonetheless remains to be shown that green solutions also have economic co-benefits<sup>19</sup>: if green approaches reduce economic growth there will be obvious policy conflicts.

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17 [https://thailand.prd.go.th/mobile\\_detail.php?cid=4&nid=10661](https://thailand.prd.go.th/mobile_detail.php?cid=4&nid=10661)

18 For example – a Green Climate Fund (GCF) Financed Programme entitled 'Increasing Resilience to Climate Change Impacts in Marine and Coastal Areas along the Gulf of Thailand'. The GCF approved a USD\$3 million grant for Thailand, to be implemented by UNDP, over a four-year period starting in August 2020.

19 For example, mangrove restoration is good for tourism, prevention of coastal erosion and enhancing bio-diversity.



## 4. Phuket transformation vision

33. A vision of 'New Phuket' is needed which includes gradual diversification of an inclusive economy along with a new approach to higher productivity tourism and installation of green infrastructure while at the same time generating growth and employment. The long-term vision of 'New Phuket' should be achieved through an inclusive process, incorporating the views of a wide range of stakeholders. A tentative vision could be:

**A green, inclusive and resilient development with the 'New Phuket' being recognised as a low-carbon destination offering tourists and businesses an exceptionally high quality natural and built environment, with skilled and healthy communities (leave-no-one-behind) and a creative, multi-dimensional, inclusive, economy**

## 5. Strategic break-throughs for recovery and transformation

### Balancing short and longer-term development efforts

34. Whilst getting people back into work and re-starting the tourist economy in the short term (to 2025) are obvious priorities<sup>20</sup>, planning for the longer term (to 2030+), with gradual economic diversification is also imperative.
35. It is understood that as the pre-pandemic Phuket economy was highly efficient, there will be a temptation to try to rebuild the economy as it was. This would be a mistake. The Phuket economy was successful, but also very vulnerable to an economic shock – the pandemic. The aim should be to ensure that in future the 'New Phuket' economy is more diverse and better able to withstand future shocks<sup>21</sup>.

<sup>20</sup> Investments that support small enterprises and create employment need to be prioritized with targets focused on achievements by 2027

<sup>21</sup> This recommendation is reinforced by the current analyses of the COVID-19 that continuing to cope with COVID is likely to continue, even with high rates of vaccination

## Learning lessons from the achievements of the Phuket sandbox

36. During the pandemic, the government attempted to re-engage the tourism industry by providing incentives to attract international tourists whilst ensuring associated health safeguards. The 'Phuket Sandbox'<sup>22</sup>, allowed fully vaccinated tourists from low to medium risk countries to visit the island without mandatory quarantine in a quarantine facility: in effect, Phuket was the facility. The Sandbox plan was that after staying in Phuket for at least 14 days tourists were allowed to visit other Thai destinations, but this was constrained to date by high infection rates in other parts of Thailand<sup>23</sup>.
37. By vaccinating about 70 per cent of the island's population, and all hospitality workers, in effect Phuket was operating as a mini-oasis. It was hoped that the sandbox would serve as a model to revive the tourism sector and the country's economy, gradually allowing more tourism hotspots to welcome foreign guests back when the pandemic subsided<sup>24</sup>. The dependence of at least seven million workers on tourism nationally, which contributed about 20 per cent of the country's gross domestic product, left the government with little choice but to start taking risks to ease open the borders.
38. Lessons need to be learned from the Phuket Sandbox, both about its achievements and its shortcomings. Its achievements include: (i) preparation prior to its opening - Phuket prepared well in terms of the vaccination rate, as 76 per cent of the population had the first vaccine inoculation and 59 per cent had the second inoculation—far better than anywhere else in Thailand; (ii) after the opening of the Sandbox, the new infection rate did not come from tourists<sup>25</sup>, reflecting the effectiveness of the measures; (iii) the Sandbox enabled at least initial recovery of revenue<sup>26</sup> and job creation; and (iv) anecdotal evidence from interviewing businesses in the field suggested that the Sandbox served as a lifeline for businesses in terms of essential revenues. On the other hand, the lessons learned included that better management and care of migrant workers is necessary.

## Strengthening public and private investment project planning

39. Reviews of the PDPs during the pandemic suggested that investment identification and prioritization needed to be strengthened to ensure an effective response to the short-term impacts of the pandemic and to consolidate the 'New Phuket' in the medium and longer term. The large number of PDP projects identified<sup>27</sup> and the mismatch with funding availability suggested that project identification and prioritization were not well linked to development objectives and funding realities. This probably accounted for the large gap between the public funding that the authorities in Phuket sought and that which was provided by the State budget.

22 The Phuket Sandbox strategy was approved by the Centre for Economic Situation Administration (CESA)

23 At the time of writing, infection rates in Phuket have been increasing as labor begins to migrate back to take advantage of the recovering economy.

24 With successful implementation of this pilot Sandbox scheme, in the fourth quarter of 2021 it would be implemented in other popular tourist destinations including Chonburi (Pattaya), Chiang Mai, Krabi, Phang Nga and Surat Thani (Koh Samui).

25 Sandbox monitoring suggests that infection rates have risen as migrant workers have returned, but not through formal ports of entry.

26 <https://thaipublica.org/2021/07/phuket-sandbox-success-not-about-immediate-numbers/>

27 In the current PDP, for example, there are 977 potential investment projects, valued at 267 billion Baht (8.8 billion US\$).

## Increasing funding flows

40. Public sector budgetary stress means that domestic public investment funding will be limited in the short and medium terms at least (5 to 10 years): the private sector can be a 'game-changer', enabling short- and longer-term project investments to support immediate recovery and longer-term consolidation of a diversified economy.
41. Although there are public goods in Phuket that the market is unlikely to provide (secondary roads for example), it is recommended that every effort is made to look for opportunities to encourage and benefit from local, national and international private sector investment. Such investment will have a dual function: (i) creating wealth and jobs (leaving no-one behind); and (ii) contributing to a low carbon<sup>28</sup>, diversified economy which benefits Phuket's population as a whole (leaving no one behind) and achieving the 'New Phuket'.

## Strengthening private investment marketing

42. Marketing strategies for national and international private investment project opportunities in Phuket should be refreshed. Phuket is a strong international brand and best use needs to be made of this. Please refer to Section 3.6 for more details.

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28 For example, through the use of regional climate funds to finance green infrastructure



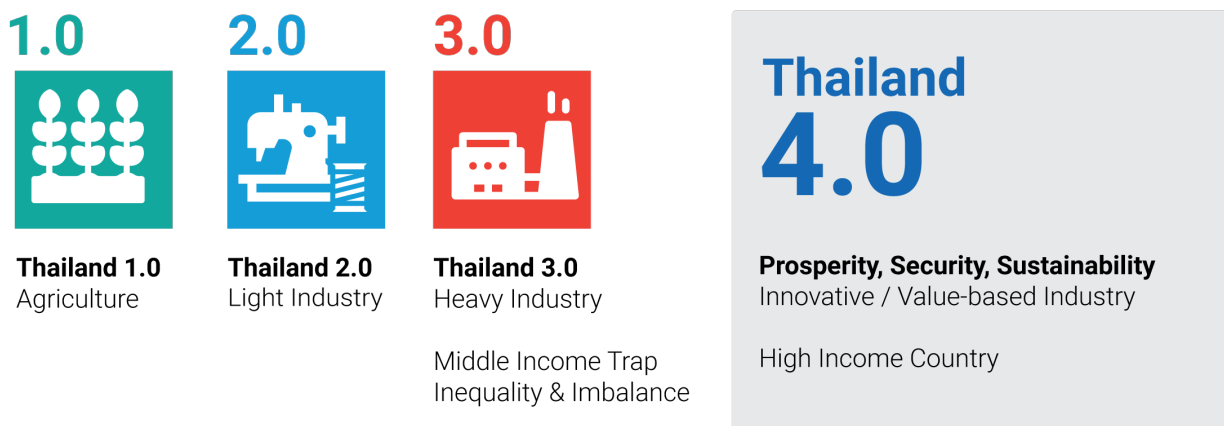
## **2. Implementing Strategy #1**

Project identification  
and prioritization

# 1. National planning context

43. The 20-Year National Strategic Plan aims for a balance between social and economic development and environmental stewardship. The six key strategies are: (i) national security; (ii) national competitiveness enhancement; (iii) human capital development and strengthening; (iv) social cohesion and a just society; (v) eco-friendly development and growth; and (vi) public sector recovery and development.
44. Underpinning the existing strategy and plan is the Thailand 4.0<sup>29</sup> (2015) development vision of Thailand's fourth industrial revolution. The concept of the value-based economy is exemplified by the change from commodities to innovation, from industries to technology and from trade in goods to trade in services. Transformative innovations include social enterprises and start-ups, from traditional services to high value services and from unskilled labour to knowledge workers and highly skilled labour. Among sectoral transformations is the aim to shift towards the Bio-Circular-Green (BCG) model, building on Thailand's agricultural sector.
45. The 13th National Economic and Social Development Plan is now being prepared<sup>30</sup>. Current priorities (which are very relevant to the 'New Phuket' vision) include:
- Thailand becomes a destination for value-based and sustainable tourism
  - Thailand becomes centre of medical and high-value health industry
  - Thai major urban areas are prosperous, modern, and liveable
  - Thailand has a Circular Economy<sup>31</sup> and a Low Carbon Society

**Figure 4: Thailand 4.0**



29 <https://thaiembdc.org/thailand-4-0-2/>

30 Preparations continue throughout 2021 and into 2022

31 Shifting towards a more circular economy will mean optimising the use of resources within the economy by increasing the duration of a product's useful life and ensuring when a product has reached the end of its life its resources can be productively used repeatedly, so creating further value. Consequently, the added value in products remains in the systems for as long as possible, so reducing waste. The transition to a more circular economy requires changes throughout value chains, including product design, new business and market models, novel ways of turning waste into a resource and changes to consumer behaviour. The move to a more circular economy will bring Phuket environmental, financial and social benefits.

46. Thailand has a strong commitment to the SDGs and the Sufficiency Economy Philosophy (SEP) approach<sup>32</sup> and SDGs have been integrated in the 20 – Year National Strategy Framework and the 13th National Economic and Social Development Plan. Aside from these long-term planning frameworks there are also continuing economic rehabilitation programmes which are relevant to Phuket's recovery needs. The vision of 'New Phuket' which includes gradual diversification of the economy along with a new approach to higher productivity tourism, installation of green infrastructure and inclusivity is relevant to the current and emerging national development frameworks.

## 2. Provincial visioning, planning and budgeting

### Phuket Provincial Development Plan

47. The PDP acts as the development framework of the Phuket provincial authority. The PDP is updated annually to ensure its responsiveness – it is a rolling, and hence a dynamic plan. The revision schedule starts in early August every year and a submission to central government is normally scheduled in October. The revised Plan is reviewed in public hearings and is subsequently approved by the provincial authority. Among projects in the PDP, the ones that the province thinks require immediate start are selected into the Provincial Action Plan (POP) to request budget allocation from the central government.
48. As shown in Figure 5, there were 3 development clusters in the 2018-2022 Phuket Development Plan, and 9 development strategies (Figure 6). In the plan these 3 clusters had 977 potential investment projects, costed at 267 billion Baht (8.8 billion US\$). In 2022 PDP, there were 1,045 potential investment projects, costed at 274 billion Baht (9.03 billion US\$). For the fiscal years 2021 and 2022, there were 196 and 136 potential investment projects respectively.
49. Although the number of potential investment projects were slightly changed across the last two fiscal year however their investment cost significantly declined from 42 billion Baht (1.42 billion US\$) in 2021 to 8.5 billion Baht in 2022. The 3 clusters of both plans were value-based economy and international high-value services; environmentally friendly urban development to support new growth engine (SMART city); and human resource, social development, and security management:

#### **A value-based economy and international high-value services [Plan (1) to Plan (4)]**

50. The first development cluster, value-based economy and international high-value service path, was linked to the Thailand 4.0 20-year national strategy on competitiveness, particularly creating a more diverse tourism sector. For example: (i) developing a nature and culture-oriented Meeting, Incentive, Conventions, Exhibitions (MICE) sub-sector; and (ii) strengthening the provincial capacity to become a centre of medical tourism.
51. It should be noted that although there was a significant number of proposals presented in education hub and medical city strategies (21 for education hub and 15 for the medical city in 2022 PDP), none of these proposals were allocated to the 2022 Phuket Operation plan (POP). On another the other hand, 5 proposals under the community-based economy and agricultural products category which were supposed to commence in the 2022 fiscal year, were all allocated to the 2022 POP. There appeared to be weak application of a goals achievement approach.

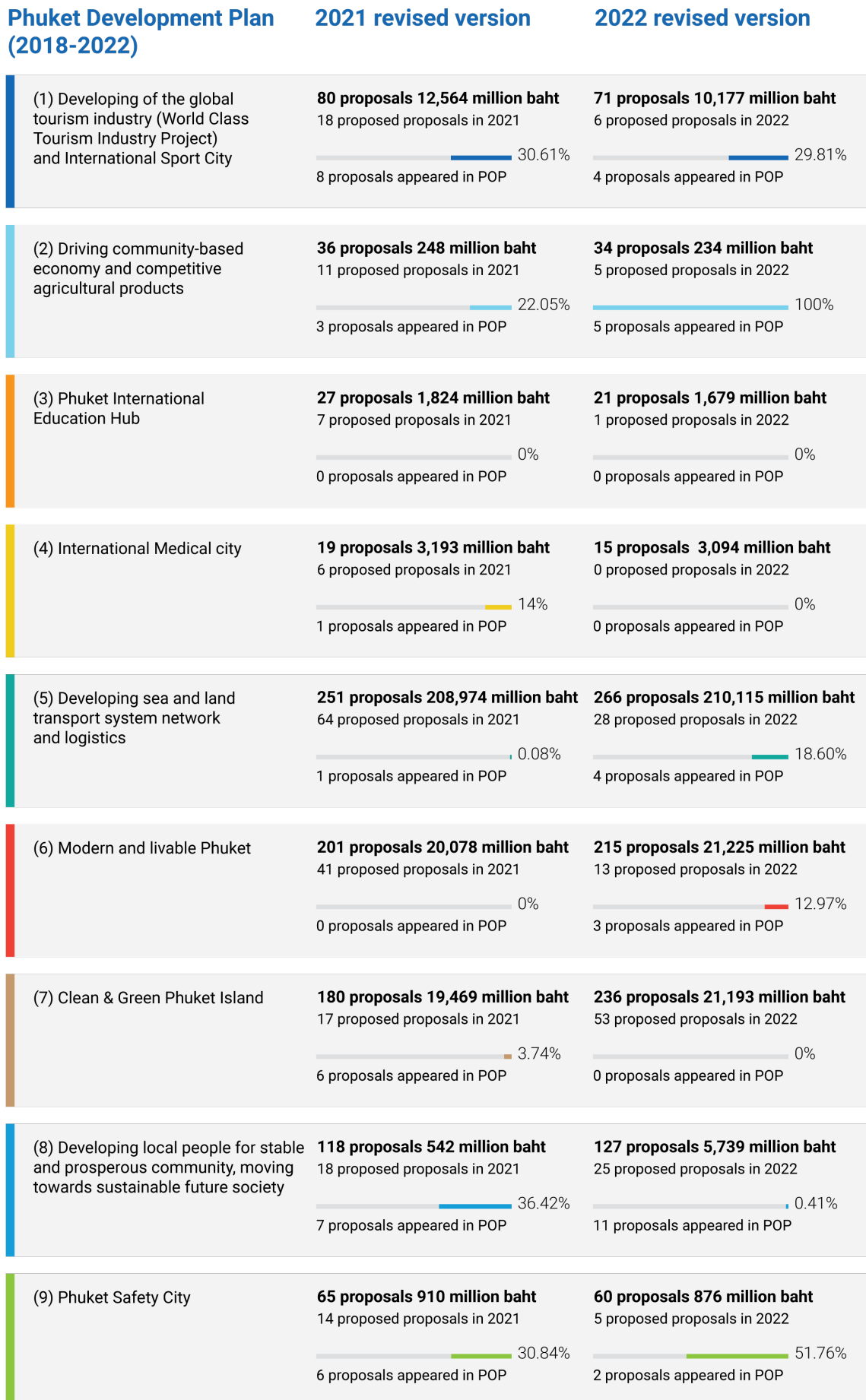
32 The sufficiency economy philosophy was conceived by His Majesty King Bhumibol Adulyadej. It offers guidelines for sustainable growth and is a tool to strengthen resilience in the face of internal and external challenges.

**Figure 5: PDP Development clusters and strategies**

**Phuket Development Plan (2018-2022)**

<p>(1) Developing city toward value-based economy and international high-value service</p>	<p>(1) Developing of the global tourism Industry (World Class Tourism Industry Project) and International Sport City</p>
	<p>(2) Driving community-based economy and competitive agricultural products</p>
	<p>(3) Phuket International Education Hub</p>
	<p>(4) International Medical city</p>
<p>(2) Environmentally friendly urban development to support new growth engine (SMART city)</p>	<p>(5) Developing sea and land transport system network and logistics</p>
	<p>(6) Modern and livable Phuket</p>
	<p>(7) Clean &amp; Green Phuket Island</p>
<p>(3) Human resource, social development and security management.</p>	<p>(8) Developing local people for stable and prosperous community, moving toward sustainable future society</p>
	<p>(9) Phuket Safety City</p>

**Figure 6: PDP strategies 2021 and 2022**





### **Environmentally friendly urban development to support new growth engine (SMART city) [plan (5) to Plan (7)]**

52. In the 2021 fiscal year, 64 percent (by number) of total projects applied for public funds by Phuket provincial authority were categorized in the provincial government's 2nd development cluster, environmentally friendly urban development to support new growth. The 2nd provincial development cluster accounts for 93 percent of the total cost of project proposals. It was closely linked to the 5th National Strategy on Eco-Friendly Development and Growth, particularly through the promotion of green growth and sustainable development and marine economy sustainable growth.
53. For example, there were several submitted projects in the PDP which aimed to rehabilitate the beach and river ecological systems to address ecological balance and the sustainable use of natural resources. Phuket's 2nd development path also included provincial energy and water resource management and these were linked to the national strategy. It is of concern that none of the 53 proposals in clean and green strategy were selected for the 2022 POP. In 2021, 6 out of 17 proposals were featured in POP but none of them actually got funded.

### **Human resource, social development and security management. [Plan (8) to Plan (9)]**

54. The third development cluster was identified with links to 5 national strategies and this development cluster accounted for only 5.4 per cent of total provincial cost estimate. The cluster had the lowest cost of the 3 development clusters despite its linkages to the other development paths and strong linkages to national plans and strategies. Typically, human resource development and social development support costs less than development clusters with civil engineering infrastructure costs and thus relatively low proportion of overall investment cost is unsurprising. Even so, only 0.41% of the total value of the proposals in this human development plan were selected for the POP.
55. This development cluster included key human capital development and strengthening (3rd national strategy) and social cohesion and equity (4th national strategy) initiatives. Public sector management and human development in this 3rd provincial development cluster were also linked to the revised national strategy for the pandemic. For example, several social security projects and urgent reskilling and upskilling projects to counter the economic impact of the pandemic were included. This reflected the national governments expansion of the social security system and health security during the global pandemic.
56. Efforts needed to be made that the current PDP (2023-2027) is supported by investment proposals that are identified in a systematic way (being based on an understanding of basic needs, and opportunities to realize PDP objectives) and have plausible financing plans (see Chapter 3 below).
57. Investment proposals need to be identified and prioritized in ways which make the PDP an effective tool for developing the 'New Phuket.' This would also enable the identification of prioritized investments (including flagship bankable<sup>33</sup> projects) necessary to achieve quick recovery and medium- and longer-term development of a Phuket economy which is less vulnerable to economic shocks and which 'leaves-no-one-behind. Details are provided in Section 2.5.

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33 Flagship projects are designed to test and develop new and innovative schemes and approaches with a view to build long-term investment opportunities and management arrangements.

## Sustainable Development Goals

58. The links between the national plans and strategies, the PDP and the SDGs were identified and details are provided in Appendix D. For example, SDG target 12.4 and SDG indicator 12.4.2 2 Hazardous wastes generated per capita and proportion of hazardous waste treated, by type of treatment” could be part of the PDP’s “Clean and Green Phuket” Strategy. The following Figure 7 shows the links between the objectives of the PDP strategies with the SDG targets.
  
59. The clean and green strategy of PDP was strongly related to SDG targets 6, 7, 9, 12, 13, 15, and 2. For example, SDG indicators 6.1.1, 7.3.1 could be integrated into the PDP’s clean and green strategy to enhance the achievement milestone of the PDP strategy. PDP strategy, developing sea and land transport systems, aligned with SDG 11 (sustainable cities and communities), SDG 10 (reduced inequalities), and SDG 9 (industry, innovation, and infrastructure) and PDP strategy, modern and liveable Phuket, aligned with SDG 11 (sustainable cities and communities), SDG 10 (reduced inequalities), SDG 6 (clean water and sanitation), SDG 7 (affordable and clean energy) and SDG 12 (responsible consumption and production).

Figure 7: PDP strategies and SDGs



## Basic infrastructure demand

60. Deficient basic infrastructure can act as a constraint to both short and longer-term economic development which is environmentally and socially sustainable. Infrastructure and natural resources are struggling to cope. The 'new Phuket' will rely heavily on an effective transition to green infrastructure provision.
61. **Waste management** is an example. As shown in Table 1 about 1,000 tonnes of waste collected daily. Of this only about 100 tonnes are recycled. Waste to energy is one of the circular economy solutions that can have economic, social, and environmental co-benefits through efficient use of natural resources, reduced emissions, job creation, and fostering innovation.
62. While advanced thermal technologies provide a high level of sanitation and baseload energy, two-thirds of common municipal waste can be converted to other forms of energy, fuels, chemicals, and fertilizers for higher economic and social impact<sup>34</sup>. Phuket has two waste incinerator plants – a 2.5MW municipal facility and a 12MW plant built by PJT Technology<sup>35</sup>. Under the Power Development Plan, the Energy Ministry will issue feed-in tariffs for waste-generated electricity next year, and purchase up to 400MW in 2022. This strengthens Phuket's and Thailand's energy security and protects the environment, especially in tourist areas with waste-management and environmental issues.

**Table 1: Waste management in Phuket**

Area	Waste (Tons/Day)	Waste Disposal (Tons/Day)	Waste Recycling (Tons/Day)
Phuket Provincial Administrative Org.	151.09	136.09	15
Phuket city Municipality	159.9	143.9	16
Kohkeaw Subdistrict Administrative Org.	16.8	14.8	2
Vichit Sub-District Municipality	90.69	82.45	8.24
Chalong Subdistrict Administrative Org.	52.82	48.04	4.78
Rawai Sub-District Municipality	50.44	45.86	4.59
Karon Sub-District Municipality	63.94	57.94	6
Kathu Municipality	57.01	52.01	5
Patong Municipality	185.83	167.83	18
Kamala Subdistrict Administrative Org.	17.9	15.18	2.71
Thepkrasattri Subdistrict Administrative Org.	10.94	9.44	1.5
Thepkrasattri Sub-District Municipality	16.54	14.94	1.6
Srisunthon Subdistrict Administrative Org.	53.34	48.34	5
Cherngtalay Subdistrict Administrative Org.	13.87	10.87	3
Cherngtalay Sub-District Municipality	17.69	15.19	2.5
Paklok Subdistrict Administrative Org.	16.86	15.33	1.53
Maikhaow Subdistrict Administrative Org.	12.47	10.97	1.5
Sakhu Subdistrict Administrative Org.	6.29	5.09	1.2
<b>Total</b>	<b>994.42</b>	<b>894.27</b>	<b>100.15</b>

Source: Pollution Control Department from <https://thaimsw.pcd.go.th/provincdetail.php?id=83>

34 Although on a small-scale, the Koh Tao participatory integrated waste management project for conserving the coral reef around Koh Tao, Surat Thani, is an example of a short-term measure.

35 The municipal plant is offline while approval is sought for the private sector to join its management.

63. **Transport** is another basic infrastructural weakness in Phuket – even with the proposed light rail system (a PDP proposal managed at central government level<sup>36</sup>), public transport links to and from the proposed system will be necessary and overall, emissions reduction through demand management will be essential. Public transport systems need to be enhanced and hybrid and electric vehicles introduced wherever and as soon as possible.
64. Another challenge the island faces is its **limited water resource and capacity for treatment and distribution**<sup>37</sup>. Renewable energy is also an issue for consideration. These examples of waste management, water resource, treatment and distribution, transport and energy infrastructure components are all eligible for private sector funding. The mass transport system requires public investment and the government allows private sector investment in water treatment management, waste management and power plants.
65. **Social infrastructure** is also included in the government's list of infrastructure for which private investment is welcomed, including education infrastructure, hospitals and public healthcare services, and convention centers.

## Natural capital – protecting natural assets

66. Phuket has a total of about 16.63 km<sup>2</sup> of coral reef cover. The coral reef areas that are close to the open sea are in fairly good condition, especially where there is no effect from coastal pollution, while the west side of Phuket Island, from the north of Karon beach up to Niyang beach, the coral reefs are mostly in a state of decay. The east of Phuket where seagrass bed and mangrove forest grow naturally, the coral reefs in these areas are still able to develop to some level and are comprised mostly the types of coral that can grow under shallow water with some sediment. However, with the rapid development of inshore and offshore activities in the past two decades, there is increasing damage to these coral reef areas<sup>38</sup>.
67. Many resorts and hotels are now being built in the mountains and near coastal areas. These land development projects have detrimental impacts on the marine ecosystem. With heavy rains (and with forest land encroachment) soil and sediment are washed in to the sea, covering coral and other marine habitats with sand, stones, and sediment. Though the short-term impact is not so noticeable, in the longer-term, these marine resources will be destroyed.
68. Five species of sea turtle are known in Phuket - leatherbacks, green turtles, loggerheads, hawksbills, and olive Ridley's. All of these are endangered species, and they are less frequently sighted every year. In the open ocean, commercial fisheries are threatened with being fished past their maximum sustainable yield. With the continuing pressure for residential and commercial development, and the rising value of land, the preservation of Phuket's historical heritage (for example the architecture of Old Town Phuket) is also at risk.

36 The concept of the proposed tram system is being reconsidered, perhaps to be adapted to a Bus Rapid Transit system, which would be less expensive.

37 In pre-pandemic conditions, Phuket needs 220,000 m<sup>3</sup> of water for consumption each day but can only treat and distribute 104,173 m<sup>3</sup> per day (and this is a decline from 2018 processing capacity by 5.16%)

38 Although on a small-scale, the Koh Tao participatory integrated waste management project for conserving the coral reef around Koh Tao, Surat Thani, is an example of a short-term measure.

69. The infrastructure demand to satisfy not only the resident population, but also tourists and the need to protect Phuket's natural assets has a cost (sometimes called 'the invisible burden'<sup>39</sup>). In summary there is a demand for investment in: (i) **Energy and GHG reduction** – infrastructure upgrades (including the introduction of green technology) to manage peak demand and to achieve increased use of renewables; (ii) **Water** – infrastructure upgrades (including green technology) to avoid over-exploitation (leaving residents without a potable water supply); (iii) **Solid waste** - infrastructure upgrades (including green technology), to overcome problems of uncollected waste, unsanitary waste dumps and pollution (to reduce harm to human health and ecosystems); (iv) **Sewage** - infrastructure upgrades (including green technology), to prevent untreated sewage (to reduce harm to human health and ecosystems); (v) **Natural capital** – maintain bio-diversity, green corridors and protected areas, and prevent loss of bio-diversity and ecosystems; and (vi) **Social capital** – avoid higher cost of living, and amenities for residents being displaced by tourists and undermining of community values.

### 3. Short and longer-term strategic development planning

70. It is welcome that the PDP is updated annually to ensure its responsiveness – it is a dynamic plan. For example, investment criteria can be adjusted to meet the needs of new circumstances arising in Phuket, nationally or internationally. The key to a successful dynamic planning process of this kind is an effective PDP monitoring and evaluation process, linked to stakeholder and public participation.

### 4. Investment project identification and prioritization

71. Driving up standards of project identification and prioritization and financial planning in the PDP and setting clear ambitions for building resilience to and mitigating the impacts of climate change will bring multiple benefits to the province. To ensure this, the right investments must be made in the right places at the right time and the necessary skills and opportunities need to be built within communities.
72. In 2021, fewer than half the 32 proposals that were included in the POP received the approval funds, only 119.1 million Baht was approved in the 2021 fiscal year. This approved amount constituted only one third of the cost of the selected proposal in POP.
73. Investment project identification and preparation is arguably the largest challenge facing provincial planners aiming to achieve a sustainable pipeline of projects prepared for private participation.
74. An estimate of the funding available for public investment is essential. This should be precise for the next budget year (which is normally the subject of detailed planning) and indicative for following 3-5 years. Many public investments are implemented over more than one year and need assured funding over the period of implementation.

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39 Destinations at Risk: The Invisible Burden of Tourism. Epler Wood et al. (2019)

75. In many countries, public investment funding is accordingly planned over a 3–5-year period as part of a rolling public investment program. Keeping the total cost of public investments within the financing limit is important since delays lead to the postponement of benefits and reduce the economic efficiency of the funding. The PDP is in effect a provincial public investment program to which accepted procedures and decisions criteria for project selection should apply.
76. Funding for public investment is from several sources. These comprise:
- **Earmarked funding from the State budget** - these are funds designated for specific public investments which cannot be used for other purposes and over which provincial administrations have no discretion.
  - **Fungible funding for public investment** from the State budget which can be used at the discretion of the provincial administration.
  - **Funding from the provincial (PPAO) budget** - in practice, sub-national budgets are almost entirely for recurrent costs and rarely address public investments.
  - **Public private partnership** where private investors fund investments which would otherwise have been financed from public funds.
77. The appraisal of public investments varies according to size. Large infrastructure needs full appraisal which considers different dimensions of feasibility – technical, financial, economic, and environmental. This process – referred to as economic analysis – assigns values to non-financial costs and benefits (such as environmental impacts and improved health) in estimating net benefits. In other words, the analysis goes beyond financial gains. The result is an estimate of the gains to the economy taking account of a range of changes.
78. This analysis usually does not address the relative gains and losses to different groups in society and hence does not consider inclusion. Methodology for this was developed in the past but proved too complex. There is now no objective way of apportioning the different impacts of a public investment across society.
79. Estimating the net benefits of public investments using standard measures of project worth (economic internal rate of return, benefit-cost ratio or return on investment) indicates which gives the best return to the economy. No other scoring is required, with this an objective analysis which resolves competing demands on capital investment funds. Use of a common target minimum rate of return means that only projects which exceed this level are selected, with those with the highest rates of return selected first and others added until funds are exhausted.
80. But while economic analysis for larger public investments is common, comparative analysis between competing uses for funds is rare. Instead, a public investment will be expected to pass a threshold of minimum economic rate of return. Done well, this indicates whether the proposed investment is a good use of scarce public funds. Accordingly, economic analysis is essential for larger proposed public investments and is often contracted out rather than being done by public bodies.
81. Smaller public investments rarely warrant this level of analysis and selection is often more arbitrary. More subjective judgement is applied. Appraisal is likely to be less extensive and can usually be done by public bodies.
82. Accordingly, two processes for project appraisal are required: (a) full feasibility analysis for larger projects above a threshold cost and (b) a lighter analysis for smaller projects. Larger projects will normally require full feasibility analysis leading to estimation of rates of return before selection, whereas a scoring system for smaller projects is appropriate. If these processes are adopted, monitoring investment project identification and prioritization efficiency would be helpful.
83. Contracting out feasibility studies means that public bodies do not need to have this capability but must nonetheless be capable of interpreting the results. Capacity for the analysis and selection of smaller projects is required since it is rarely worth contracting out this type of analysis.

84. Core criteria to be applied at both levels of appraisal should address the following guiding principles and could be introduced as data availability and analytical capacity strengthens:
- **Short-term recovery and longer-term “New Phuket” development** - whilst economic recovery in the short term (to 2025) is an obvious priority, planning for the longer term (to 2030+) with gradual economic diversification is also imperative.
  - **Environmental sustainability** - projects must aim at improving environmental and health conditions through careful selection and design of infrastructure projects and investments. This means safeguarding the urban environment in a traditional way, and introducing and prioritizing environmental projects and environmental components within a project. For instance, a transport project initially dealing with road improvement and public transport may include components on renewable fuel, traffic management, and other elements that improve the urban environment.
  - **Mitigation of and adaptation to the effects of climate change** - all projects must include an assessment of climate change effects mitigation potential and/or adaptation needs, and describe investments needed to address these issues. This may also have bearing on the financial analysis in terms of potential for accessing carbon credits and partial financing of capital investment with such credits.
  - **Poverty reduction and gender equality** - infrastructure investments should enhance the access of disadvantaged groups to basic services and contribute to their economic development. The UNDP funded pandemic impact analysis has worked with counterparts to identify the poor, their needs, and the types of investments needed to pull them out of poverty.
  - **Good governance** - the project preparation process should be as inclusive, transparent, and accountable as possible and involve multiple forms of civic engagement as well as working closely with stakeholders to identify Phuket’s needs.
85. The appraisals should not be limited to flagging possible adverse impacts from an infrastructure investment, but actively deal with all cross-cutting subjects in an integrated, and cross-sector infrastructure development approach. The appraisal should coordinate with and build on other relevant plans, technical assistance, and investment undertaken by national and sub-national government, development agencies, non-government organizations and/or community-based organizations, the private sector, and the informal sector.



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# 3. Implementation Strategy 2#

Funding

86. As noted in Chapter 1, a pressing recovery challenge is the lack of adequate funding for either short term investments, or, particularly, larger, longer-term investments which could underpin the more resilient ‘new Phuket.’ Innovative public and private investment funding are essential for short term recovery and longer-term development to support the “new Phuket” with a diversified economy to reduce vulnerability to shocks.

## 1. Phuket development funding from central government

87. The key constraint is that the public purse is diminished, with tax collection yet to recover to the pre-pandemic level, and with increased public spending to meet the demands of the pandemic response and economic recovery. There is less funding available from central government than would have been expected without the pandemic.
88. As shown in Figure 10, in 2021, less than half of 32 proposals that were selected to POP received the approval funds, only the amount of 119.1 million Baht was approved in the 2021 fiscal year. This approved amount constituted only one third of the cost of the selected proposal in POP.
89. A common complaint in Phuket is that the budget for infrastructure is provided on a per capita basis, the population counted being the permanent full-time residents. It does not include temporary residents – predominantly tourists in the case of Phuket and also workers from other provinces.

**Figure 8: Phuket approved investment budget 2017-2021**

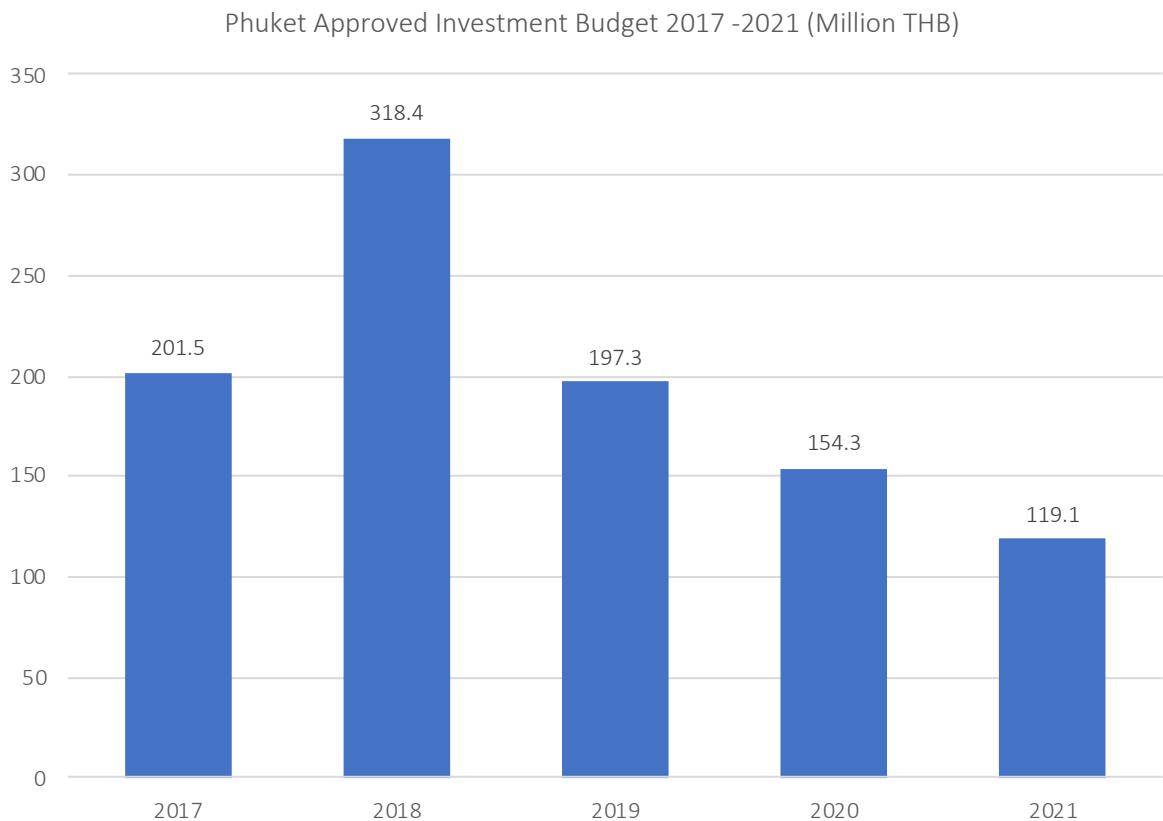


Figure 9: Phuket income sources

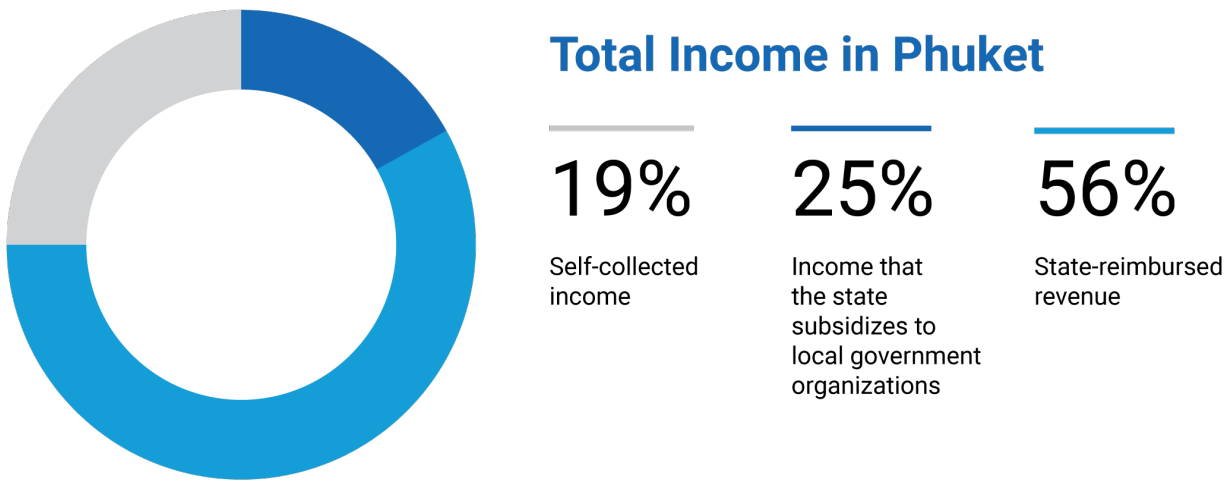
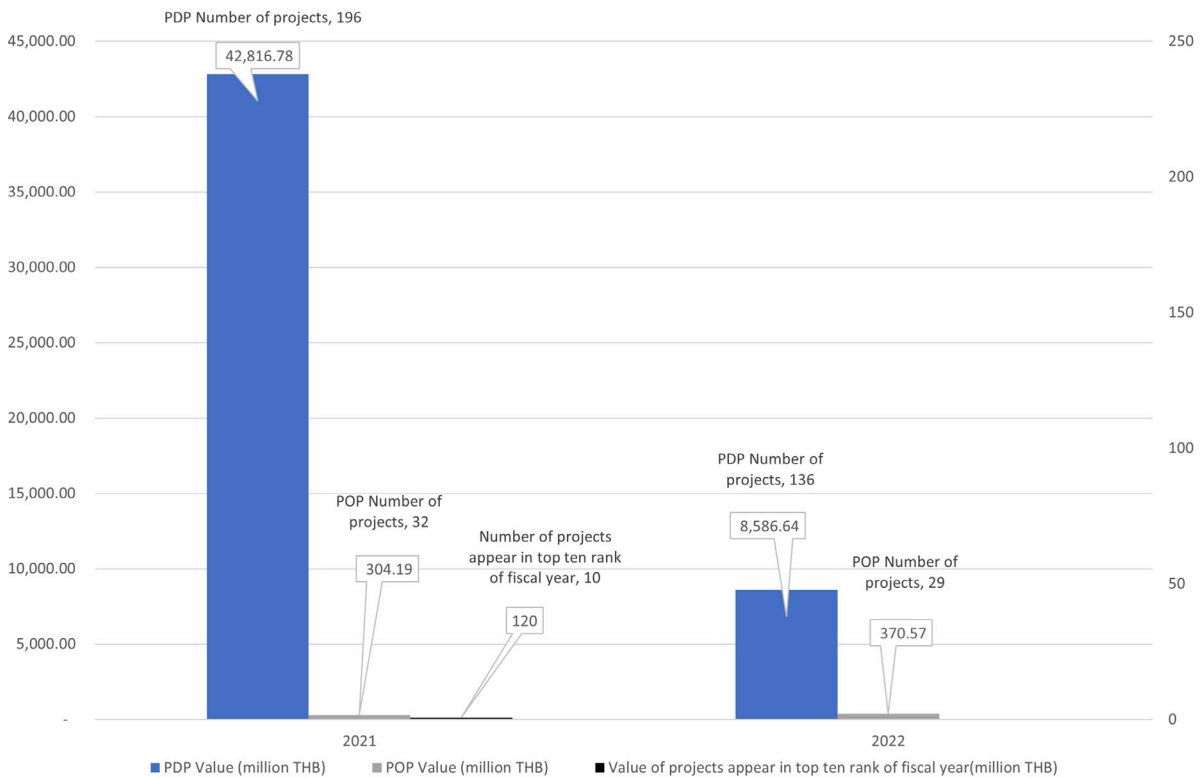


Figure 10: PDP projects 2021 and 2022



90. The base population (registered and non-registered) is 588,000 and this is used in the calculation of GPP. Migrant workers (predominantly Burmese, Laotian and Cambodian) number approximately 66,000<sup>40</sup>. In addition there are 11,144 retired or other expatriates<sup>41</sup>. Tourists averaged 163,336 per day in 2019 and in total it is estimated that the pre-pandemic daily population in Phuket was approximately 848,480. This represents an increase of about %44 over the base population.
91. The allocation of central government funds to provinces is driven by the desire to allocate funds equitably, to ensure regional equity. As Thailand recovers from the significant impact of the pandemic it is arguable that allocation of funds may, at least temporarily, be focused on areas of the country with the capacity for rapid recovery and in particular, foreign exchange earnings and high rates of employment.
92. Allocating funding for public investment per capita is anyway unlikely to be economically efficient, with standard measures of project worth a better way of deciding the use of scarce funds. This would of course demand application of established project appraisal methodology nationwide across all provinces. This may exceed provincial capability and so may not yet be feasible. Without adjustments to central government allocations based on population and adjustments to favour, even temporarily, areas with the potential for fast and efficient recovery, Phuket will need to turn to the private sector to contribute more to the recovery and transformation efforts.

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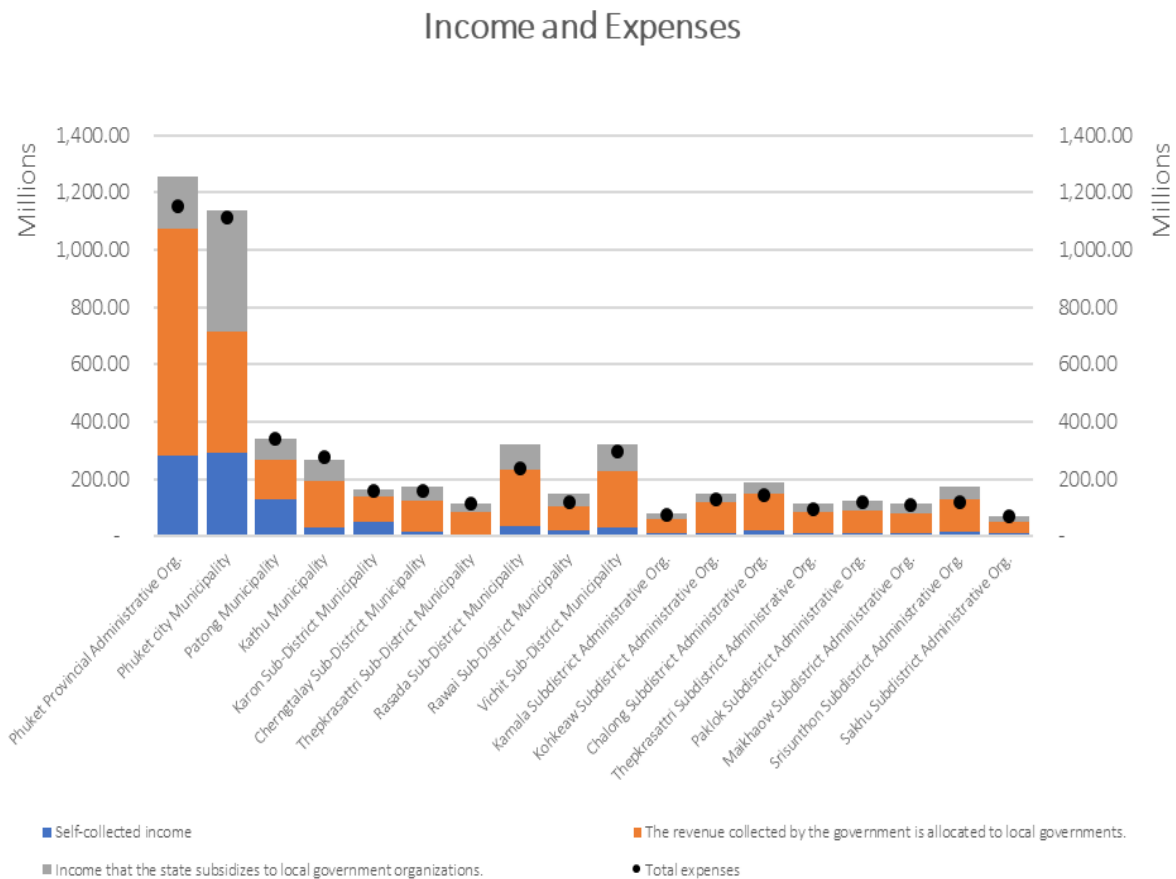
40 Source: Immigration Office and Labor Department, Phuket (pre-pandemic estimate)

41 Source: Immigration Office, Phuket

## 2. Sub-provincial funding (municipal)

- 93. There are 19 sub-provincial public organizations in Phuket, 1 Phuket provincial administrative organization (PPAO), 1 city municipality, 2 municipalities, 6 sub-district municipalities, and 9 sub-district administrative organizations<sup>42</sup>. In the 2021 fiscal year, the total receipt budget of 18 state local organizations was 6.2 billion Baht. 56% of the recipient income was derived from state-reimbursed revenue, 25% of the recipient income was subsidized from state, 19% were from self-collected income.
- 94. Specifically, Phuket provincial administrative organization and Phuket city municipality are local organizations which earn the highest self-collected income in Phuket. The major tourist destination district, Patong municipality, earns approximately 0.3 billion Baht per year. 92% of this income is derived from Patong municipality’s tax income and fee, fine and permit income.
- 95. At municipality level the demand for services is not spread evenly throughout Phuket. Table 2 shows the distribution of demand for services from vulnerable communities. In 2020 Patong municipal investment was relatively low (see Figure 11) and significant unemployment was not anticipated in the area. In Table 2 (and Figures 12 and 13), it can be seen that economically vulnerable households in this area were among the highest in February 2021.

**Figure 11: Municipalities - income and expenses**



- 96. With stringent pandemic policies, which included school closures, vulnerable group in Patong were even more affected since they had to bear the meal and online learning costs of their children, including their opportunity cost of taking care of their children during their working hours (in the sense that this cut their opportunity to work).

42 Data from 1 organization is missing

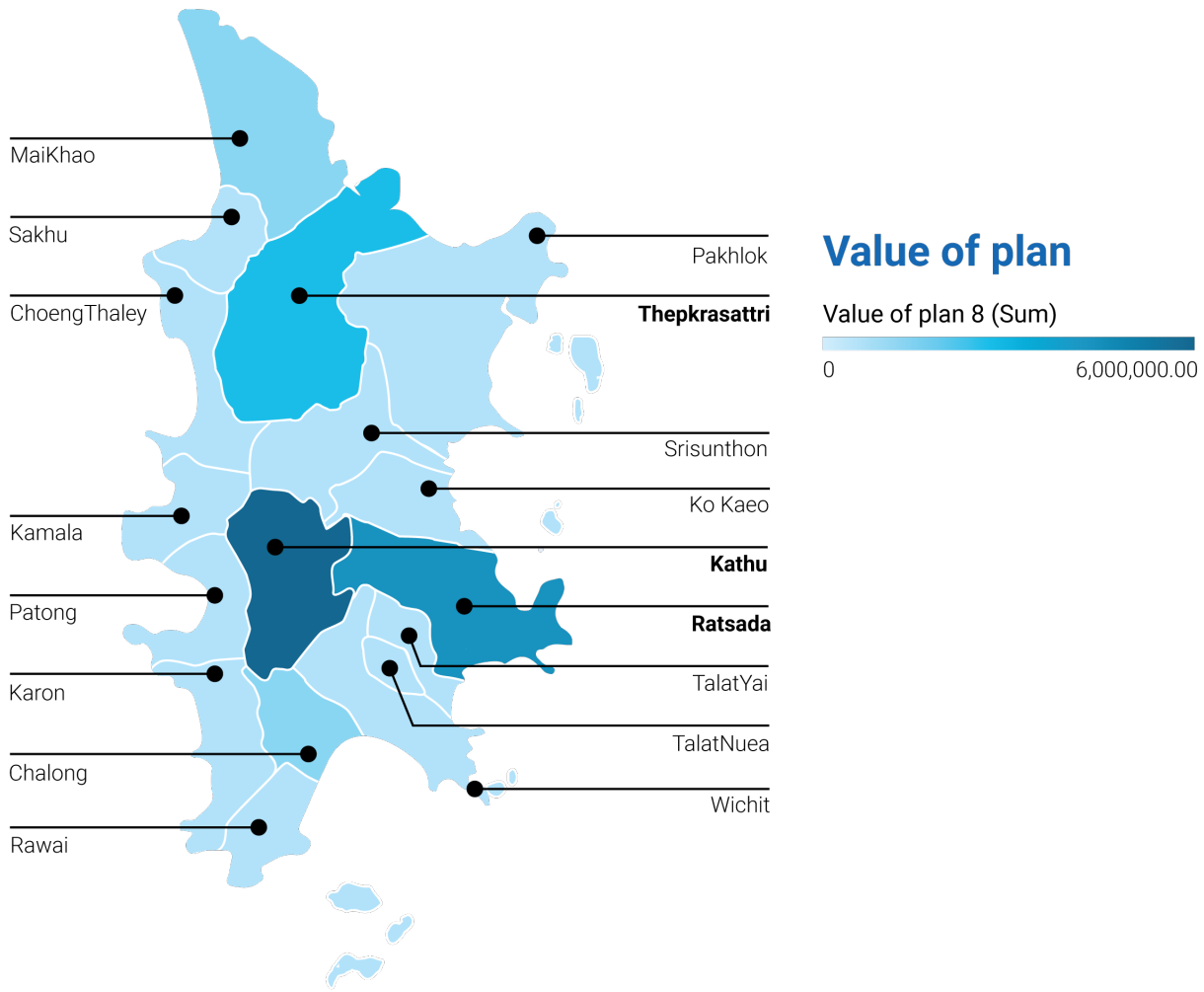
**Table 2: Demand for social support**

Area	Household With Children or Elderly	Household With Disabled group	Bedridden patient in household	Chronically-ill member in Household	Unemployed Labor Member in Household	Inaccessible To Government support campaign	Others vulnerable (ex.semi-employed labor in Household)
Kamala	37	15	6	14	3	0	6
Kathu	75	54	23	1	15	1	0
Karon	108	38	19	36	27	5	110
Chalong	46	63	21	20	17	15	8
Choeng Thale	89	40	27	56	19	3	15
TalatNuea	97	48	27	17	29	2	13
TalatYai	122	78	16	13	40	3	17
Thepkrasattri	158	96	45	50	39	4	41
Pakhlok	346	116	28	47	58	52	29
Patong	520	74	22	41	63	32	17
MaiKhao	129	107	25	34	29	30	116
Ratsada	115	98	23	20	52	22	8
Rawai	46	13	6	15	20	27	4
KoKaeo	198	100	26	26	125	113	49
Wichit	104	82	50	32	7	0	26
Srisanthon	136	61	49	25	31	9	24
Sakhu	57	72	6	24	28	9	6
<b>Total</b>	<b>2,383</b>	<b>1,155</b>	<b>419</b>	<b>471</b>	<b>602</b>	<b>327</b>	<b>489</b>

Source: Door to door survey in Feb. 2021 conducted by Phuket provincial office

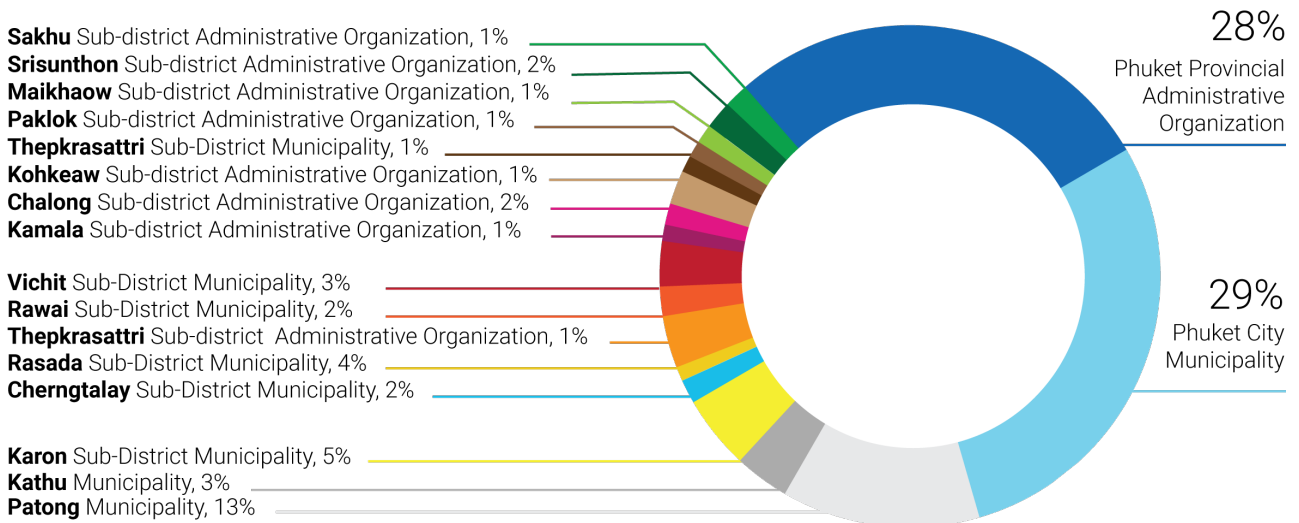
97. Inefficient and inadequate taxes and government expenditure hinder the provision of education, health, social protection, and physical infrastructure needed to promote green and inclusive development. Although private finance is crucial, much of this expenditure must also be met by stronger tax revenue. The pandemic exacerbated fiscal pressure, with revenues falling sharply because of the economic downturn and stimulus measures. Combined with higher spending, fiscal deficits widened considerably.
98. Self-collected income includes: (i) taxes; (ii) fees, fines and licenses; (iii) municipality owned property income (e.g., leases); (iv) utilities and commercial income (e.g., waste water treatment revenue in Patong municipality); (v) subsidies (other than State subsidies); (vi) miscellaneous income; and (vii) capital income.

**Figure 12: Distribution of demand for social support**



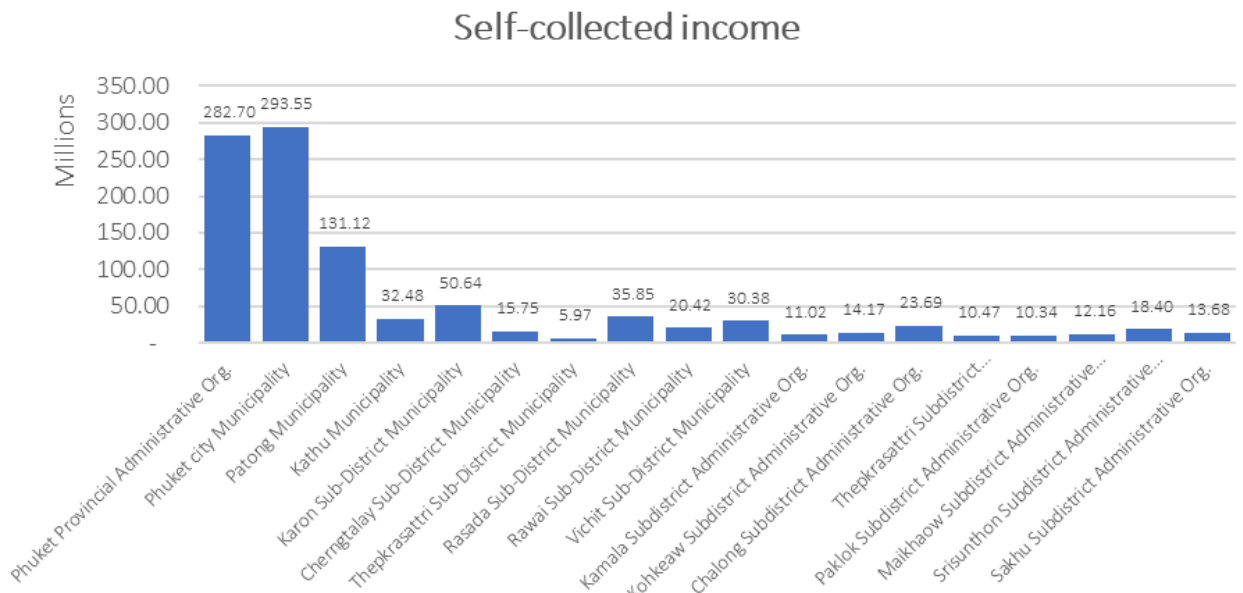
**Figure 13: Self-collected income by municipality**

**Self-collected income**



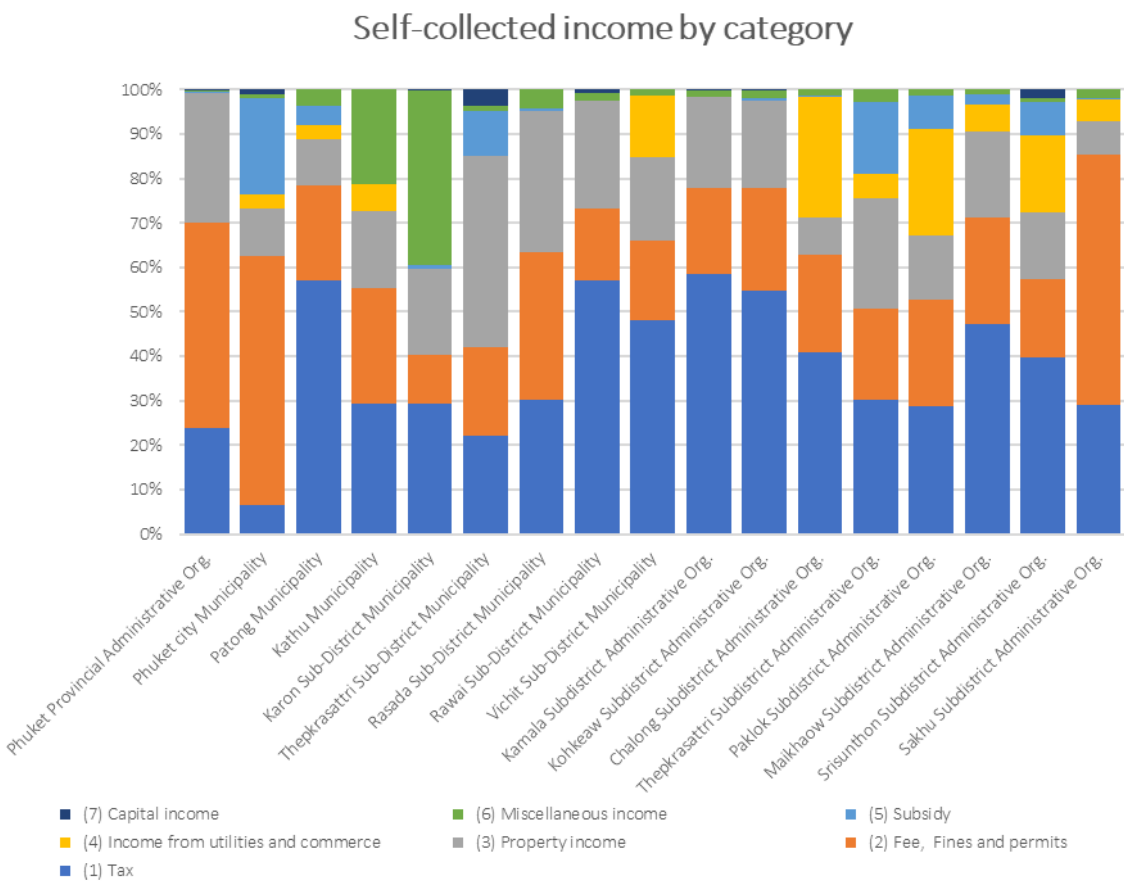
Data source from: Phuket Provincial Administrative Organization. (2021). From <http://www.phuketcity.org>

**Figure 14: Self-collected income by amount by municipality**



Data source from: Phuket Provincial Administrative Organization. (2021). From <http://www.phuketcity.org>

**Figure 15: Self collected income by category by municipality**



Data source from: Phuket Provincial Administrative Organization. (2021). From <http://www.phuketcity.org>



## Figure 16: Tourist taxes in the Balearic Islands

In 2016 it was announced that the Balearic Parliament would create a new tax which would apply to stays in tourist accommodations. Although small (between €1- €4 per person/per day) the idea was that this would hopefully offset people looking to come to the island for a short period of time, instead encouraging more meaningful trips as after nine days the tax was discounted by 50 per cent.

This tax has proved highly profitable for the Balearic economy with some €104 million raised in 2019 and a further €270 million raised since the tax was implemented. The Balearic Islands are placing the money made via taxes back into sustainable means.

The projects, selected by a Committee for Sustainable Tourism made up of Balearic officials, economic stakeholders and other organizations with a vested interest in the island's sustainability journey.

99. The major source of self-collected income of most municipalities, except Phuket city municipality, is derived from tax revenue (other than income tax and VAT). Currently, there is a 1 per cent (of room charge) tax applied to tourists – there is scope for increasing this based on a review of tourist taxes in comparable tourism sites. Figure 16 notes the benefits of an efficiently collected and adequately priced tourist tax in a comparable island tourism-based economy.
100. Other possibilities of increasing local revenue include: (i) an additional landing fee could be imposed on international and domestic flights, at different rates; (ii) a climate change fee could be charged with explicit connection to funding for climate change adaptation of mitigation investments; and (iii) a 'green contribution' could be sought from tourists on a voluntary basis. Additional taxes and fees would nonetheless need to take account of the effects on Phuket's competitiveness as a tourist destination.
101. In addition to having scope to increase the tourist tax, there is also scope to increase the efficiency of collecting the tax. Reviews of collected taxes and numbers of tourists suggest a degree of inconsistency, which could be accounted for (at least partially) by the existence of unregistered hotels. Other sources of funds could include (for example) carbon credits from climate change adaptation /mitigation projects to be shared among all households and micro-enterprises.
102. A key institutional innovation could be the preparation of a local revenue enhancement action plan. Such a revenue enhancement action plan is a combination of bringing about additional revenue streams and increasing funds from within existing revenue streams.
103. Associated with this, the use of an efficiency index<sup>43</sup> (for example, local revenue generation per 1 million Baht government budget allocation) can be considered to earn additional funding from Central Government. This will give Phuket (and other more "efficient" provinces and local governments) additional budget support. The main value of this suggestion is that it will enable Phuket to unlock additional resources should its revenue generation from the local revenue enhancement action plan meet its target.

43 An 'efficient' province or local government will get additional, at progressive rate, funding from the Central government, if its annual revenue generation outperforms the benchmarked levels—percentage and amount increases. Phuket could initiate this via 2nd phase Sandbox.

### 3. Community funding

104. Corporate social responsibility is evident in Phuket and in many other tourist destinations has also proved to have many roles and the brought beneficial impacts to the community: (i) closer ties and interdependencies between corporations and community; (ii) sharing the costs the society has to pay due to environmental degradation; (iii) transfer of technology from international companies to local administrations; (iv) environmental protection measures achieved together by corporations and communities; (v) poverty alleviation in the communities; (vi) and help in data management. Several large hotels and others are leading the way in showing the benefits and effects of being socially responsible corporate citizens by working with communities and NGOs to take action that improve the environment, wellbeing and livelihoods of people on Phuket.
105. A Phuket Social Fund could also be considered. It could resemble (but not replicate) the Village Funds which have been operating in local communities in Thailand. The Village Funds<sup>44</sup> receive direct funding from the Village Fund Agency<sup>45</sup>. The Village Fund Agency receives an annual government budget allocation and more financial resources are received from various sources including specialized banks. These funds could support the elderly, scholarships and other social purposes aimed at supporting the most vulnerable. There is sufficient experience of operating such a social fund and it could be linked into the proposed financial management capacity building.
106. Crowd financing<sup>46</sup> is also innovative and applicable: a good project idea will be well received by someone who is attracted and willing to either donate or partner in the project development and investment.

### 4. The role of the private sector

107. A vision for 'New Phuket's' more diverse economy will continue to contain tourism as its core economic sector, over the short- to medium run. Nevertheless, "new" tourism for Phuket will gradually transform towards sustainable<sup>47</sup> tourism.
108. The public sector has been the major source of financing for infrastructure in Thailand. With rising investment requirements and constrained public budgets, greater levels of private investment are therefore needed. Phuket needs to rapidly increase its access to a full range of private finance sources, including institutional finance (pension and insurance funds hold \$10 trillion in assets in Asia), capital markets (project debt or equity issuance), and commercial banks<sup>48</sup>. These sources can be available to fund public investments.

44 The Village Fund was devolved to Thailand's 80,000 villages and urban wards. Endowed with an initial working capital of one million Baht, elected village-level committees manage and run their lending operations, with only limited guidance or oversight from the center. Originally conceived mainly as a vehicle for boosting rural development, especially by providing credit for non-traditional activities, Village Funds in practice mainly lend to poorer, agricultural, households, and most of the money is used, ostensibly, for agricultural pursuits or as consumer credit. The average VF loan is equivalent to 8% of a household's income, and is much smaller than loans from other formal sources. VF loans are the main source of credit for about 10% of adults; 40% of adults do not borrow; and the remaining 50% borrow chiefly from other sources, especially the Bank for Agricultural and Agricultural Cooperatives.

45 [www.villagefund.or.th](http://www.villagefund.or.th)

46 Crowdfunding is a different way to raise money for good ideas. People are increasingly bypassing more traditional funding routes such as bank loans or grants and turning instead to the people around them and in their community to support their venture.

47 According to the World Tourism Organization, sustainable tourism is 'tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities'

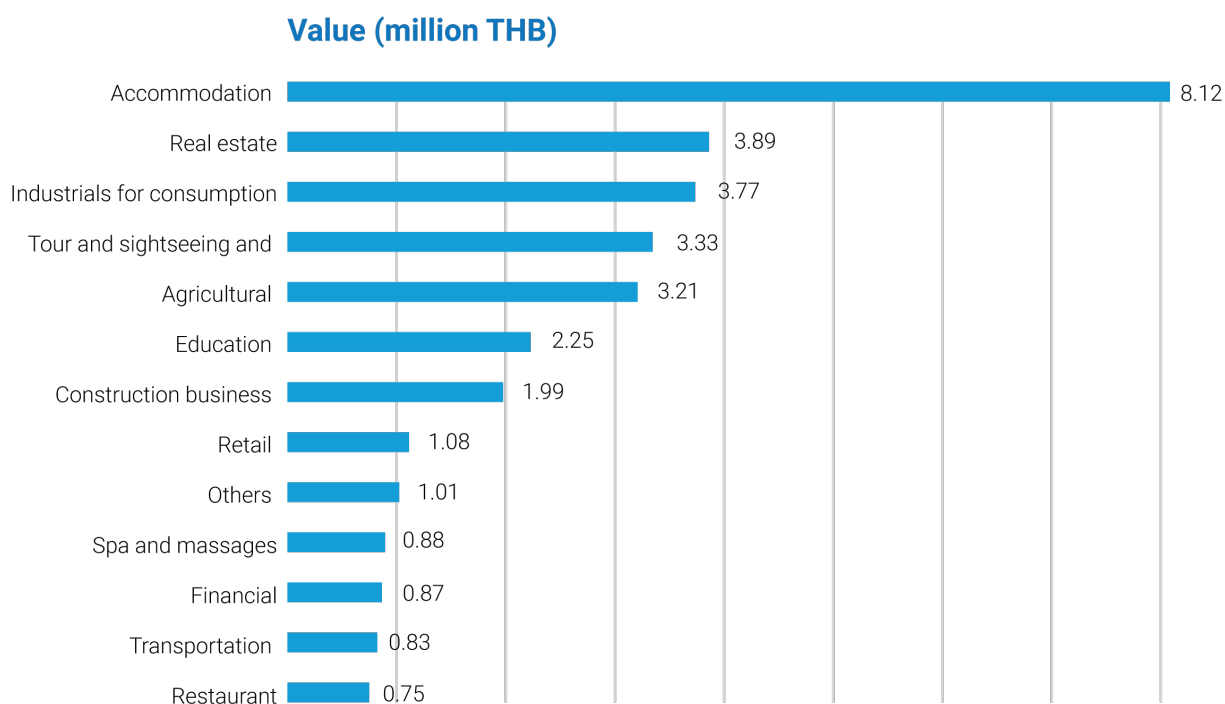
48 G. Inderst. 2016. Infrastructure Investment, Private Finance and Institutional Investors: Asia from a Global Perspective. Asian Development Bank Institute Working Paper Series: No. 555. Tokyo.

109. It is recommended that every effort is made (by local business for example) to look for opportunities to encourage and benefit from local, national and international private sector investment. Such investment will have a dual function: (i) creating wealth and jobs (leaving no-one behind); and (ii) contributing to a low carbon, diversified economy which benefits Phuket's population as a whole (leaving no one behind).

## Fund-raising options

110. The main sources of additional private funds will be: (i) the private sector, through investment in private initiatives (which achieve provincial objectives) and possibly through PPP initiatives; and (ii) capturing regional climate and green funds. Gaining access to regional climate and green funds would enable much needed investment in Phuket's basic infrastructure, releasing provincial financial capacity for other provincial priorities.
111. The 'New Phuket' economy will rely not only on medium sized enterprises but also on micro and small enterprises. If enabled to do so, and if it is appropriate to do so, sustainable financial support to micro and small enterprises will benefit the most vulnerable of the Phuket labour force.
112. Commercial banks should have an important role to play in mobilizing capital for local entrepreneurial projects (and associated infrastructure)<sup>49</sup> and revenue earning infrastructure projects (which will compensate for lack of infrastructure funding solely from the public sector). A measure of demand for loans is provided in Figure 17.
113. The availability of adequate security for potential investors (through guarantees) is a matter of concern, especially for smaller enterprises (please refer to Figures 18 and 19). From interviews with the Phuket bankers' association, it is expected that commercial banks will be even more stringent and risk-averse in at least the short-term after the pandemic.

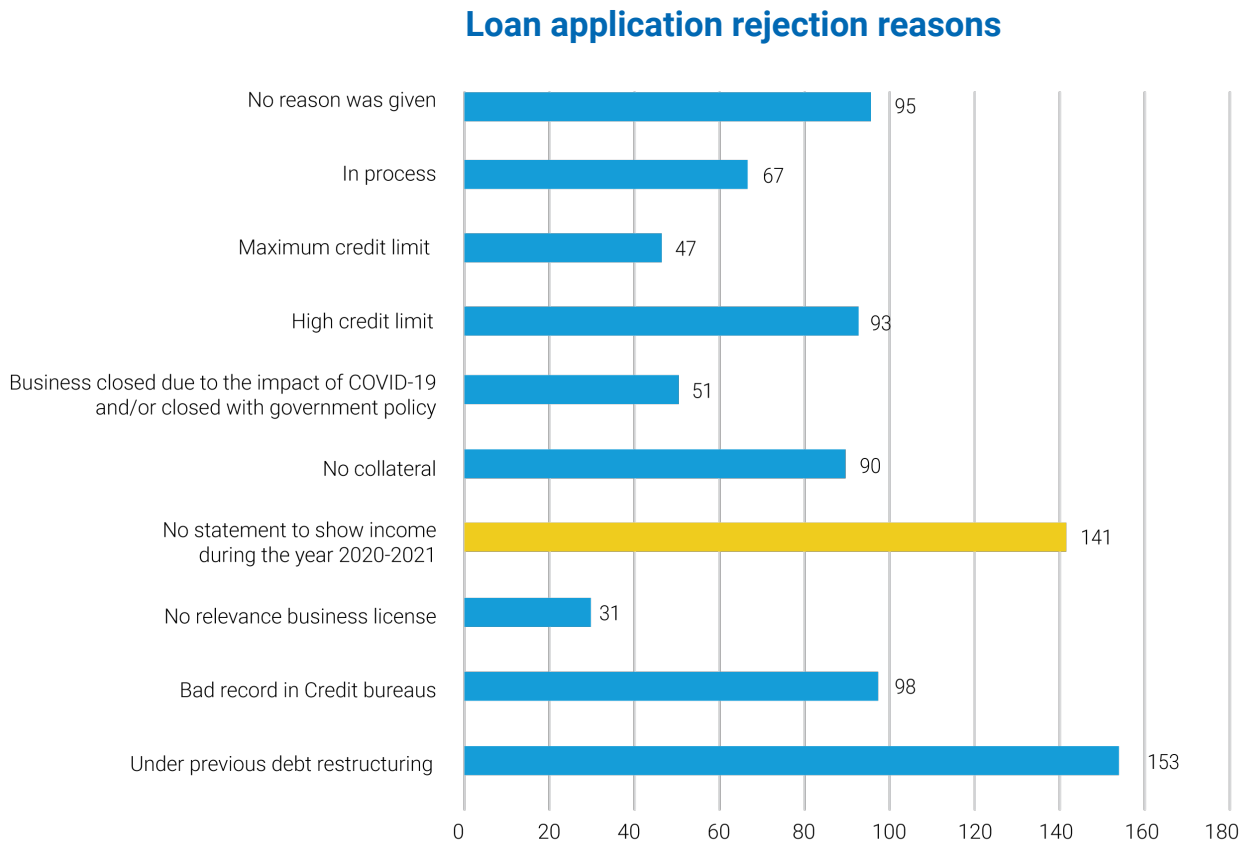
**Figure 17: Loan applications by SMEs**



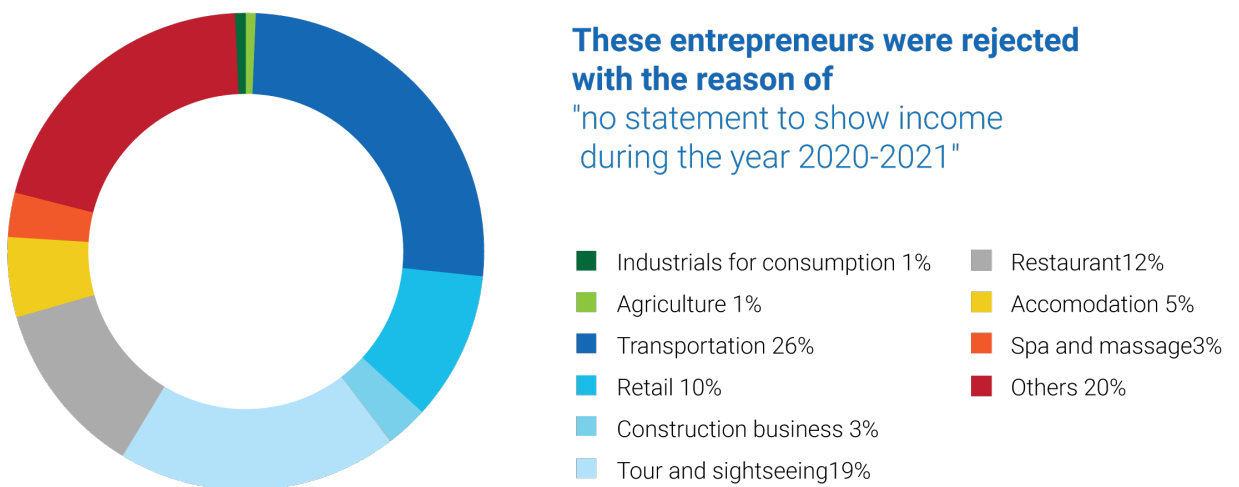
<sup>49</sup> Even large companies seldom finance projects with their own capital. It is cheaper, and less risky, to raise capital for a project than using their own capital. Hence, there is a great tendency that companies will go to a capital market to raise funds, rather than using their own capital.

114. The following Figure (Figure 18) shows the results from the survey of MSMEs conducted in June 2021 on the recovery loan. It was found that a poorly performing business model during the COVID-19 pandemic and the lack of capacity to plan for business operations using loan funds, including debt repayments, were the major causes of inaccessibility to financial aid scheme.

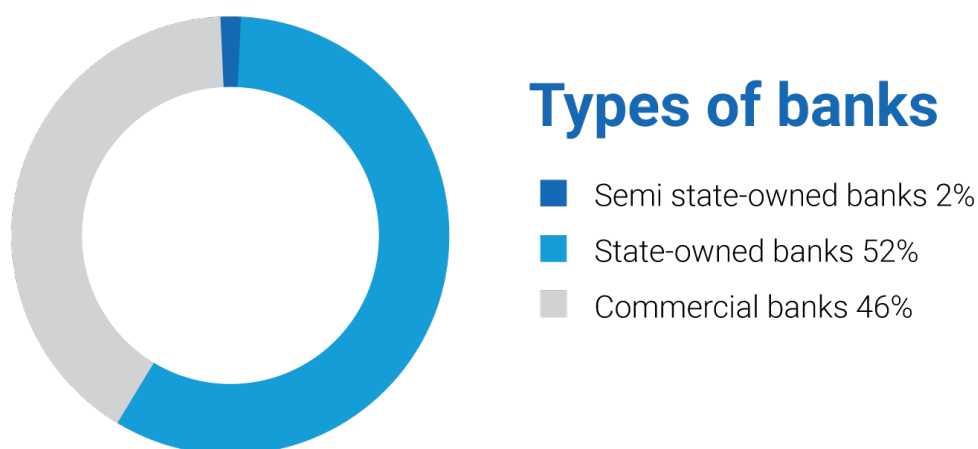
**Figure 18: SME loan application rejections**



**Figure 19: SME rejections primarily due to the pandemic**



Data source from: Phuket Provincial Survey on Covid-19 loan MSME June 2021.

**Figure 20: Types of banks used by loan applicants**

115. It should be noted that during the height of the pandemic loan applications for transportation, tours and sightseeing activities had a high rejection rate, since their business were heavily constrained (if operating at all) throughout the 2nd - 4th quarters of 2020.
116. The pie chart (Figure 19) presents the number of applications by MSME's to different types of banks in Phuket during the Provincial Survey in Mid-2021. High risk made projects unattractive to private finance. Some of the commonly identified risks include: (i) poor project development; (ii) unproven or unpredictable revenue streams; (iii) delays in land acquisition and environmental clearances, and (iv) additional costs from the use of new or green technology which do not necessarily translate into commensurate increases in revenues.
117. Bankability can be built into project design with the use of appropriate project identification and prioritization techniques (see Chapter 2).
118. In addition, the use of public funds to catalyse private finance into projects can be helpful (the provision of off-site infrastructure for example), but the investment project needs to be bankable. This has led to initiatives such as the Global Urbis—announced at the 2018 One Planet Summit - to provide global cities with financing and TA to mobilize private capital<sup>50</sup>. Inclusion of the public sector also enhances environmental safeguarding through the application of environmental appraisal standards.
119. Public-private partnerships (PPP) are a formal technique for funding investment projects. PPPs between a government agency and private-sector company can be used to finance, build and operate projects, such as public transportation networks and convention centers<sup>51</sup>.
120. While the advantages of PPPs have long been recognized, many countries, including Thailand, are still experiencing difficulties in its implementation. Over \$US 200 billion of capital has been raised globally by private equity fund managers for strategies dedicated to infrastructure investments. The bulk of capital in these funds is from long-term investors such as pension funds and life-insurance companies. Infrastructure investments<sup>52</sup> provide asset-liability matching, stable, inflation-linked returns, and a relatively lower risk profile compared to equities.

50 European Bank for Reconstruction and Development. New Calls to Cities and Investors to Deliver Sustainable Finance Growth.

51 As noted in paragraph 69, social infrastructure is also included in the government's list of infrastructure for which private investment is welcomed, including education infrastructure, hospitals and public healthcare services, and convention centers

52 According to Preqin, a research and consultancy firm that provides data on private equity, real estate, hedge funds and infrastructure funds and other alternative investments.

121. There is no lack of private capital or commercial debt available to finance well-prepared projects. The real problem is that the cycle that sees infrastructure projects become infrastructure assets has a gap in terms of adequacy and quality of investment preparation and early-stage investment and development. Adequate due-diligence and preparation of technical, legal, financial, economic, environmental and social issues are necessary for government to assess trade-offs and select an optimal structure for the transaction that is attractive to potential private investors. To improve project readiness, it is useful for governments to develop a checklist and an administrative system that could indicate whether a project is ready to be brought out to the market.
122. Management capacity in the government, particularly in contracting agencies, needs to be further developed to more effectively and efficiently bring projects forward to completion. For markets at an early stage of development, delivering a few good examples of successful PPP projects within a reasonable time, rather than focusing on quantity of projects, is a most effective strategy for attracting investors.
123. The availability of special incentives to attract private investment is essential - attractive exchange rates, interest and wage rates and the overall investment climate (e.g., political stability, infrastructure readiness), government policies and environmental standards. Emphasizing the “greenness” of potential investment projects, using the bio-circular-green economy model (BCG), could facilitate further funding opportunities from green investors including climate funds and SDG aligned funding sources.
124. Marketing strategies for private investment project opportunities in Phuket could be refreshed (as outlined in Chapter 4, below). Overall, there is a need within the PDP to provide a facilitating environment for private enterprise to engage in its own commercial enterprise, make profits and pay taxes. It will take time to achieve this in Phuket - responsibility for the enabling environment is rarely delegated to sub-national level and most of the key variables (as per the ‘doing business’ criteria) are a national responsibility.
125. The capacity of the local administration to review and negotiate investor proposals along with the ability to package infrastructure development to be attractive for private investment are essential and capacity development of this kind is discussed in Chapter 5 below.

## International funding

126. Global and regional bodies have established (and continue to establish) funds to support climate adaptation and mitigation.
127. As countries face an increasing financing gap for climate-resilient infrastructure, especially following the COVID-19 pandemic, it is essential for governments to tap into domestic and global capital markets with green and sustainability bonds:
128. Green, social, sustainability, and sustainability-linked bonds are financing instruments where the proceeds are used for eligible projects with positive environmental and/or social outcomes<sup>53</sup>. Climate bonds are a subset of green bonds. They can be issued to raise finance for investments across multiple sectors in climate change mitigation, adaptation, and resilience<sup>54</sup>. Two-thirds of green bonds issued in ASEAN countries were used to finance renewable energy and energy efficiency projects. Such a green bond in Thailand is the B.Grimm Green Bond for Thailand solar projects<sup>55</sup>. This was Thailand’s initial certified climate bond and the first issued by a Thai energy company. Access to such green bond facilities could be sought for Phuket infrastructure projects, solar power in this case.

53 The International Capital Market Association (ICMA) has developed Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines to improve consistency and integrity for issuers and investors in relation to these fixed income debt instruments.

54 The Climate Bonds Standard and Certification Scheme, coordinated by the Climate Bonds Initiative (CBI), ensures investments are consistent with the Paris Agreement to limit global warming to well below 2°C above pre-industrial levels.

55 In 2018, Asian Development Bank invested \$155 million (5 billion Baht) in B.Grimm Power Public Company Limited’s first 5-year and 7-year climate bond issuances. Proceeds are allocated to nine operational solar power plants (total capacity of 67.7 megawatts (MW)) and seven solar power plants under construction (total capacity of 30.8 MW).

129. Following on from this initial certified climate bond and with technical support from the Asian Development Bank (through the ASEAN Catalytic Green Finance Facility), Thailand's Ministry of Finance (MOF) and National Housing Authority (NHA) have designed green, social, and sustainability bonds based on global and ASEAN standards and best practices.
130. The initiatives include support for Thailand's first sustainability bond, a first-of-a-kind issuance by a sovereign government in Southeast Asia. Issued by MOF's Public Debt Management Office in two tranches totalling THB30 billion (about \$964 million), the bond was oversubscribed three times, and its proceeds will be used to finance green infrastructure through the Mass Rapid Transit Orange Line (East) Project. It will also fund social impact projects supporting the country's recovery from the COVID-19 pandemic, such as public health measures, job creation through small and medium-sized enterprises, and local public infrastructure development with social and environmental benefits.
131. The NHA's maiden social bond was issued in three tranches totalling THB6.8 billion. It is among the first social bonds issued by a state-owned enterprise in Southeast Asia. The bond will finance affordable housing in Thailand and promote sustainable communities. Other green and sustainability bonds are in development.
132. These social and sustainability bonds will help the country recover after the pandemic by focusing on long-term, green, and inclusive infrastructure. The question for the Phuket provincial government and its entrepreneurs is how to gain access to bond finance. Asian Development Bank has prepared a new country partnership strategy to support Thailand's economic recovery with a pipeline of green and climate-resilient infrastructure projects and Phuket could also gain access to this pipeline. An advantage is that technical assistance is also available on a grant basis, which could help to ensure the capacity is strengthened to identify and prioritize investment projects and to ensure that environmental and social safeguards are in place – helping to achieve the 'New Phuket'.
133. While the public sector and public finance will be core to the implementation of the SDGs, it is acknowledged that the private sector and capital markets will also play a key role. According to some estimates, implementation of the SDGs will open market opportunities valued in trillions of U.S. dollars. The Business Commission for Sustainable Development identified some 60 sustainable and inclusive market "hotspots" in four key economic sectors worth at least US\$ 12 trillion: energy, US\$ 4.3 trillion; cities, US\$ 3.7 trillion; food and agriculture, US\$ 2.3 trillion; and health and well-being, US\$ 1.8 trillion<sup>56</sup>. At the same time, investor interest in the SDGs is growing. Many of the world's largest institutional investors see the goals as a key framework to fill a growing investor demand for impact and to support sustainable investment strategies.
134. Green Bonds aim to contribute to, for example, SDG 7 – affordable and clean energy – by reducing the negative environmental impact of CO2 emissions and energy consumption. The types of projects green bonds finance often concern energy-efficient buildings, clean energy and clean technologies. Increasingly, green bonds attract additional investments in clean water (SDG 6), sustainable industries, innovation and infrastructure (SDG 9), sustainable cities and communities (SDG 11) and climate action, including climate adaptation measures (SDG 13).
135. Other funding sources include:
- The ASEAN Australia Smart Cities fund focuses on building liveable cities (the Phuket province could be eligible) that are green, competitive, inclusive and resilient. The fund supports activities that will enable cities to facilitate adaptation and adoption of digital solutions, systems and governance systems. The fund supports project preparation and implementation, financing and associated capacity development.
  - The ASEAN Catalytic Green Finance Facility<sup>57</sup> (ACGF) is an innovative financing initiative under the ASEAN Infrastructure Fund's 'green and inclusive infrastructure window'. The Facility is intended to scale-up private capital flows to bridge the infrastructure financing gap. It is managed by Asian Development Bank (Innovation Hub) and is developing a pipeline of bankable green projects using innovative finance approaches. The objective is to accelerate the development of green infrastructure in ASEAN by better utilizing public funds to create bankable projects and catalyze private capital, technologies and management efficiencies.

56 Better Business, Better World, Business Commission for Sustainable Development, January 2017.

57 Thailand is a key shareholder

This fund is being used to support mainstreaming green finance in Thailand. A Green Investment Opportunities report is under development with Asian Development Bank support and a national green finance facility is being prepared. Working with the Public Debt Management Office (PDMO) (Ministry of Finance) a PDMO Sustainability Bond was issued (US\$1 billion). It is planned that this will be followed by:

- A bond at subnational levels
  - Establishment of a National Green Task Force (focusing on preparation of a project pipeline, capacity building and preparation of a Green Opportunities Report (with CBI, UK)
  - A National Green Finance Facility for Green Recovery (aimed at leveraging government funds to mobilize more funds from private capital).
136. In addition to the funds available to address these challenges, there are continuing relevant initiatives from before the pandemic which are relevant to the development of the 'New Phuket'. New models of tourism which could foster more inclusive and sustainable tourism growth were developed by the Asian Development Bank together with the Greater Mekong Subregion Tourism Working Group and the Government of Australia, through the creation of the Mekong Innovative Start-ups in Tourism accelerator program under the Mekong Business Initiative in 2017. This initiative included the participation of the Business Angels Network of Southeast Asia, a network of regional investors looking for good investment opportunities in the region<sup>58</sup>.
137. Asian Development Bank is supporting the development of opportunities reshape Thailand's tourism industry to make it more competitive, efficient and sustainable. The Thailand Green Finance and innovation Facility for Investment Projects is in the Asian Development Bank's Country Operations Business Plan 2021-2023, with US\$500 million sourced from Asian Development Bank and US\$4,500 million of co-financing. Asian Development Bank has also prepared a new country partnership strategy to support Thailand's economic recovery with a pipeline of green and climate-resilient infrastructure projects.

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<sup>58</sup> Demonstration days generated substantial visibility and resulted in MIST partnering with the Business Angels Network of Southeast Asia (<https://www.bansea.org/about-us/>) to co-organize the investor showcase at Asia and the Pacific's flagship tourism industry conference, International Tourism Bourse (ITB) Asia, held in Singapore.



## 5. The funding gap and indicative financing plan

138. Estimates of the financing gap for capital expenditure are difficult to make in the absence of detailed information about current public and private resources and, in particular, infrastructure deficiency. However, by taking the total estimated Phuket Development Plan cost of 42,816.78 million Baht and the 2021 and 2022 costs shown in Figure 10, it is possible to make a very broad estimate of the financing gap.
139. Based on the 2021 and 2022 estimates expenditure the average annual expenditure would be about 337 million Baht, a total of about 1,687 million Baht for the overall Plan. This implies a funding gap of about 6,877 million Baht (about US\$211 million) for the 5-year Plan overall. This is a very rough estimate, as there is no currently accessible information on pre-pandemic expenditure, limited confidence in the project identification and prioritization process and the standards of cost estimation are not known.
140. Assuming a similar overall estimate of expenditure in the subsequent 5-year Phuket Development Plan and a similar funding gap, Phuket will need to be sourcing about 1,375 million Baht additional funds per annum (about US\$42 million). This would be approximately double the income of the Provincial government and 50 Baht per capita per annum for the actual resident population or 72 Baht per capita per annum for the formally acknowledged base population (please refer to paragraph 106). A thorough review of investment projects to be included in the Plan is recommended and criteria applied which ensure that the key recovery components are acknowledged and guide prioritization. Preliminary costing accuracy also needs to be reviewed.
141. Assuming that the funding gap is of this magnitude every effort needs to be made to ensure access to recovery and climate change funds which are available within ASEAN, regionally and globally. As noted above, recognition of is also needed of the availability of 'discounted' interest rates on loan funding from multilateral development banks in exchange for contributions to SDG achievement and climate change mitigation and adaptation.

## 6. Investment promotion

142. In general, investment is enhanced by a large number of factors, including, for instance, attractive exchange rates, interest and wage rates; investment climate (e.g., political stability, infrastructure readiness); government policies and environmental standards.
143. It is noted that the public sector by and large "controls" official investment in Thailand, and the Board of Investment is the most prominent government authority that promotes foreign investment in Thailand; others play a supportive and facilitating role. Being an office under the Prime Minister Office, with a policy board chaired by the Prime Minister, Board of Investment even has provincial offices in major provinces to attract investment projects, but not (yet) in Phuket. Should Phuket lobby for a Board of Investment office?
144. The Investment Promotion Law, which was conceived as early as 1954, is BOI's source of strength. It has been updated to accommodate the changing economic condition, government policies and regional and global investment climate. Corporate tax benefits are a corner stone of its investment promotion and tax incentives are considered to be effective instruments in promoting foreign investment in Thailand.

## Flagship projects

145. **Purpose of flagship projects:** flagship projects are designed to test and develop new and innovative approaches to project design and financing, with a view to wider application in the long-term partnerships, with associated capacity building, all of which will contribute to the development of 'New Phuket.'
146. **Selection of flagship projects** - it is recommended that flagship projects are selected which incorporate the 3 essential economic, environmental and social components of investment projects to support the delivery of the 'New Phuket' and to contribute to the achievement of an agreed vision for Phuket. As explained in paragraph 25 a recommended route to a more secure Phuket economy is to continue to offer the tourism product as it is, to the current market and in addition to focus on Product Development (as recommended by the Phuket Chamber of Commerce). In the short to medium term this offers more security against economic shocks. It is also recommended that gradually and within 10 years, the diversification is strengthened by taking the selected product developments (medical tourism for example) into new markets.
147. Candidate flagship projects have been sought in the Chamber of Commerce proposals and project proposals included the investment projects listed in the Provincial Operations Plan for 2022. On the basis of a preliminary analysis (please refer to Table 3), it is recommended that flagship investment projects could be based on MICE and Health and Wellness, both linking to Education.

**Table 3: indicative scoring of proposed projects**

Industry/ project	Efficiency	Distribution	Sustainability	Co-funding	Value adding	Fungibility	
1 Marina	3	1	2	3	3	3	15
2 Education	1	2	3	3	3	3	15
3 Gastronomy	2	3	3	0	3	3	14
4 Health and wellness	2	3	3	3	3	3	17
5 Tuna	1	2	2	2	1	1	9
6 Sports and events	2	2	2	2	2	2	12
7 MICE	3	3	2	3	3	3	17

Notes: (i) weighting score: 0/1/2/3; (ii) the basis for assigning these scores and their weighting is indicative only – to make the evaluation, the methodology will need to be agreed with key stakeholders.

148. The exercise above indicated that health and wellness and MICE are attractive ventures, followed by education and marina. The health and wellness could be linked to a health tourism chain of activities (as examples) plastic surgery, specialized treatments and anti-aging courses. The project has high potential in both forward and backward linkages and links well with Education. MICE services are cross-sectoral and cost-sharing with education would be possible. The recommendation could be reviewed within the current PDP updating process.
149. **Preparation of concept notes** - the aim will be to develop a model approach to the scoping of the potential investments, to identify likely funding sources and to design a project concept note which would engage the interest of funders. As this is a capacity building exercise as well as being an opportunity to secure funding for investment projects which will contribute to the creation of a 'New Phuket' it is recommended that an investment project design team is established from Phuket public and private stakeholders.
150. The investment packages may include infrastructure which is necessary for the projects to succeed. If this is the case 'green infrastructure' funds will be sought, if the infrastructure required is appropriate. Discrete 'green infrastructure' investments can also be considered as subjects for 'flagship' projects.
151. Project proposals from the private sector require scrutiny before adoption and should be tabled for discussion within the development framework for Phuket by key stakeholders. The scrutiny of the proposals should include the core criteria (noted above in paragraph 98) and may also consider taking the following points into account when repackaging the investment proposals:
- Efficiency criteria, financial, economic and social;
  - Generation of employment opportunities;
  - Sustainability criteria, including the bequest value of natural resources and environment
  - Co-funding opportunities, from domestic (including private and government) and overseas sources;
  - Value adding possibilities, including social and environmental co-benefits;
  - The "fungibility" or integration of economic activities in each project.
152. **The concept notes** will be designed to be consistent with the requirements of funding agencies. Concept notes will include:

**A description of the investment project or programme.** This will include the Rationale, the anticipated Impact, Outcome, and Outputs, the Indicative Investment and Tentative Financing Plans and Indicative Implementation Arrangements. The Investment and Financing Plans include a broad cost estimate (base costs, capacity building, contingencies and any funding charges) and a tentative financing plan (from a funding agency and possible co-financiers, government and possibly private sector (PPP). Indicative implementation arrangements include the government agencies responsible for coordination and implementation and a description of anticipated consulting services.

**A description of any associated technical assistance that may be required.** If the project is innovative, it may be helpful to have a supporting TA available to build capacity in the relevant agencies.

**Specification of due diligence required.** Due diligence required for project preparation will include the following: (i) technical issues engineering design usually); (ii) legal, regulatory, and policy framework. The due diligence will involve a diagnostic to the existing legal, regulatory, and policy framework to identify gaps and weaknesses, if any, especially related to a sustainable PPP; (iii) commercial, financial, and economic issues; (iv) institutional issues and governance; (v) poverty and social issues (due diligence will be undertaken to assess the investment project / program impacts on vulnerable groups and other social aspects; (vi) safeguards (including environmental impact which will be assessed for each component of the investment program. Land acquisition and resettlement impacts will be assessed and a resettlement framework for the investment program and resettlement plan(s) for contract packages will be prepared.

If the Concept Note leads to agreement between a funding agency and government, a grant funded<sup>59</sup> Project Preparation Technical Assistance consultancy would undertake the due diligence activities. In addition, major risks would be identified early to ensure time to agree the ways in which to mitigate risks.

**Preparation of a Processing Plan.** This included assessing the risks of the proposed project / program, assessing resource requirements to process the project / program from concept note to implementation and project / program completion, including the project preparation Technical Assistance consultancy. A schedule of project preparation is also required.

**Basic back-up information:** appendices covering the following will be required: (i) Basic Project Information; (ii) Problem Tree; (iii) indicative Design and Monitoring Framework for the Investment Program; (iv) description of the Project Preparatory Technical Assistance; and (v) an Initial Poverty and Social Analysis.

153. With the agreement of the Governor of Phuket a Concept Note (or notes) of this kind could be prepared with UNDP support. Central government (NESDC) agreement will be needed to take the Concept Notes to development funding agencies.

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# 4. Implementation Strategy #3

Capacity enhancement

## 1. Capacity for planning for 'New Phuket'

154. A new shared Vision for New Phuket is required. This requires broad-based participation of key stakeholders and a process that will ensure ownership of the new Vision by all parties. Once the Vision is achieved, there will need to be the capacity to develop, agree and undertake implementing strategies. Capacity building will be needed to:

**Enhance the capacity to develop public sector and private sector investment projects** which would lead to the achievement to the 'New Phuket', being relevant to national development strategy, linked to nationally determined SDG's and which would consolidate Phuket's green infrastructure;

**Strengthen the new PDP with the enhanced project identification and prioritization processes;**

**Create a flagship prototype project (or projects) relevant to the New Phuket vision and to experiment with innovative financing.** The flagship prototype project proposal could be used to gain access to sources of regional COVID-19 recovery or climate / green funding in addition to multilateral funding sources such as the Asian Development Bank.

**Continue supporting new tourism with lessons learnt from the Phuket Sandbox.** Being a part of the Andaman development cluster, Phuket Sandbox should be reviewed to derive lessons learned for the other provinces in the cluster. The relevance of the Phuket Sandbox innovation could be considered for other areas beyond the tourism sector.

**It is important to emphasize the need for capacity building that enables greater attention to vulnerable sectors and groups.** Mass tourism, for example, created externalities such as higher costs of living to all citizen in the province and the distribution of income and other benefits are not equal. A social fund may be created to help finance re-skilling, creating jobs and supporting necessary social support to vulnerable groups.

## 2. Capacity for financial planning to achieve the 'New Phuket'

155. Capacity building will be needed to enhance access to additional financial resources to both the public and private sectors. Adequate and quality public infrastructure is a basic requirement for the New Phuket, and it needs huge investment with access to additional resources. Access of the private sector to additional funding sources can also be improved, including micro and small enterprises. Table 4 provides a preliminary private sector financial management capacity building needs assessment.

**Table 4: Assessment of private sector financial planning capacity**

Aspect of capacity	Score*	Note/comments
Plan and roll out investment projects	1	Mostly are «pure» business projects
Fund raising	0	Largely dependent on commercial banks
Manage projects	2	
M&E	2	
Coordinate and communicate	2	More could be done to work with others
<b>Total</b>	<b>1.4</b>	<b>The existing overall capacity tends to be low.</b>

\*Note: Score-0 = no or absence; 1 = marginal; 2 = medium; 3 = High. It is also assumed that scores for each of the above aspect carry equal weight. Therefore, all of them can be totaled.

156. Financial management capacity building initiatives could include:

**Financial analysis** in project identification and prioritization and in financing plan preparation, fund-raising and PPP design and management

**Capacity building to provide a financial plan**, especially for the PDP and POP in the public sector

**Joint ventures through Public Private Partnerships** - a start could be made with a need assessment for solid waste management, marine pollution and waste water treatment. PPP projects maybe packaged to include other elements such as bio-diversity, carbon reduction and natural and cultural heritage to make them more attractive for funding. Natural capital is not only important for tourism, but it is also very crucial for the well-being of residents.

**Enhancing the capacity of local entrepreneurs** (MSMEs) to prepare loan requests adequately to access funds

### 3. Building a capacity enhancement role for Phuket

157. Using Phuket as a model for tourism sector and economic development capacity building in similar tourism island provinces could be considered. Phuket could be a test bed for innovative tourism development planning and management and for innovative funding of investment projects and, in addition, as the recommended gradual diversification of the Phuket economy develops, this process could be built into the diversification of the economies of the other tourism island provinces.

158. For example, a 'Comprehensive Phuket-Andaman Cooperative for Tourism' (ComPACT) initiative could be established. The main characteristics of ComPACT would be:

- It would be comprehensive, taking into account aspects of economic efficiency and equity, social dynamics and security, and environmental integrity;
- It would pioneer innovative financing, raising additional funds to co-finance infrastructure development, and to finance private sector business initiatives, including those of micro and small enterprises;
- ComPACT would support the shift of the core tourism business towards the high-end, more productive, market and product development (leading to economic diversification);
- ComPACT would demonstrate support, technically and financially, to community-based tourism, capitalizing on existing knowledge, models, and best practices;
- ComPACT could establish a funding tool, with fees and charges collected during an initial period on a voluntary basis<sup>60</sup>. Ultimately a Trust could be established (ComTrust) and this would be a further instrument for supporting micro and small enterprises / start-ups.

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<sup>60</sup> Among others, landing fee, environmental tax, bequest donation, emissions charges, development rights, green services, turtle and marine conservation, etc. are examples of this scheme. The Turtle Conservation Fund in Phanga province is a success story. Tourists are asked to consider donate to turtle conservation upon checking into a hotel. The Fund was at one time flooded with cash donation, which was used to strengthen activities of villages and civil society groups in Phanga.

# APPENDICES

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## B. Chamber of Commerce economic diversification proposals

### Rationales behind industries proposed in the Phuket White Paper

#### 1. Marina Industry

<b>Competitiveness</b>	<ol style="list-style-type: none"> <li>1. Phuket has 38 quaysides, 5 marinas, and 1 deep water port</li> <li>2. Being member of Cruise Forum Asia</li> <li>3. Readiness of hotel and tourism industry</li> <li>4. Thailand is ready to train workers for marina industry</li> </ol>
<b>Target groups</b>	The yachts bigger than 30 meters, total of 10,166
<b>Employment</b>	<ol style="list-style-type: none"> <li>1. Crew <ol style="list-style-type: none"> <li>a. Captain 596,000 baht/month (17,000 euro)</li> <li>b. Engineer 420,000 baht/month (12,000 euro)</li> <li>c. Chef 350,000 baht/month (10,000 euro)</li> <li>d. Waiter 119,000-245,000 baht/month (3,400-7,000 euro)</li> <li>e. Crew 105,000 baht/month (3,000 euro)</li> </ol> </li> <li>2. Local employment <ol style="list-style-type: none"> <li>a. Ship maintenance industry (prepare before schedule 1-2 months)</li> <li>b. Personnel in tourism and hospitality industry</li> <li>c. SMEs</li> </ol> </li> </ol>
<b>Economic related activities</b>	<ol style="list-style-type: none"> <li>1. International standards crew training center</li> <li>2. Shipyard and ship maintenance</li> </ol>
<b>Economic total value</b>	21,600 million bath/year
<b>Obstacles</b>	<ol style="list-style-type: none"> <li>1. Legal issues of 17 government agencies are not supportive to the industry</li> <li>2. Lack of support to build competitiveness</li> </ol>

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## 2. Education industry

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**Competitiveness**                      Phuket can be the location of international educational institutions. It already has 12 international schools, and 3 more schools are planned to be established. Furthermore, Phuket also has an international airport.

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**Target groups**                        1. Children of expatriate working in Phuket  
2. Children of manager leader level workers

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**Employment**                            1. Knowledgeable people/ foreign teachers  
2. Local employment – language teacher, translator

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**Economic related activities**                      1. Growth of real estate from the long-term stay of migrant family  
2. Increase expenditure for consumer goods  
3 .Increase economic opportunities from tourism industry

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**Economic total value**                      1. International education: 2,160 million bath/year  
2. Income distribution to local people 720 million baht/year  
  
Total 2,880 million baht/year

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**Obstacles**                                1. Student visa application is complicated  
2. Non-immigrant visa for parents is only limited to 90 days

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### 3. Health and wellness

<b>Competitiveness</b>	<p>According to COVID-19 rehabilitation efficiency of Thailand, Thailand has a potential in public health which attract more foreigners to reside in Thailand for a long-term</p> <ol style="list-style-type: none"> <li>1. Medical services – Phuket has hospitals with high-standard certification (JCI and HA)</li> <li>2. Health and wellness – Phuket have establishments that promote comprehensive health care activities</li> <li>3. Famous for community tourism for health</li> </ol>
<b>Target groups</b>	<ol style="list-style-type: none"> <li>1. Foreigners migrate to Thailand to avoid COVID-19</li> <li>2. Foreign businessman</li> <li>3. Senior retirement groups</li> </ol>
<b>Employment</b>	<ol style="list-style-type: none"> <li>1. Increase of medical specialists</li> </ol>
<b>Economic related activities</b>	<ol style="list-style-type: none"> <li>1. Medical agency</li> <li>2. Food industry for health and wellness</li> <li>3. Local tourism industry</li> </ol>
<b>Economic total value</b>	4,181 million baht
<b>Obstacles</b>	<ol style="list-style-type: none"> <li>1. “Phuket Save Zone” project by the RTG</li> <li>2. Use of information technology to see the needs of population</li> </ol>

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## 4. Tuna export

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**Competitiveness** Phuket has both private and public quaysides

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**Target groups** Country groups whose buy tuna, such as Japan, Taiwan, US  
More than 200 fishing boats

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**Employment**

1. Transportation
2. Refrigeration room service

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**Economic related activities**

1. Taxation and fee
2. Processed tuna industry
3. Tourism industry/ high-quality fish market

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**Economic total value**

1. Tuna export 1,380 million baht per year
2. Other income from the fishing boats

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**Obstacles** The IUU regulation

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## 5. Phuket gastronomy

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**Competitiveness**

1. Phuket is one of the UNESCO's creative food cities networks
2. 1,977 shops that meet the standard
3. Geographical location – can be a source of distribution of agricultural and fishery products
4. Unique food culture that can be developed into a high-value brand

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**Target groups**

Thai and foreign consumers

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**Employment**

More than 55,000 positions in the food industry

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**Economic related activities**

1. Processed food export
2. Development of agriculture standard
3. New menus and brands
4. Logistics and online marketing
5. Increase occupancy of real estate

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**Economic total value**

91,321 million baht/year

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**Obstacles**

1. Development of agricultural products standards
  2. Skilled workers on food industry
  3. Development of processed food technology
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## 6. Sports and events

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<b>Competitiveness</b>	<ol style="list-style-type: none"> <li>1. Phuket has accommodation/ facilities for the events</li> <li>2. Photographers, makeup artists, high-skilled industrial workers</li> <li>3. Scenery and locations can be used for events and photography</li> </ol>
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<b>Target groups</b>	<ol style="list-style-type: none"> <li>1. Thai and foreign married couples</li> <li>2. Participants of events/ sport events</li> </ol>
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<b>Employment</b>	<ol style="list-style-type: none"> <li>1. Creative and stylists</li> <li>2. Photographers</li> <li>3. Makeup artists</li> <li>4. General staffs</li> <li>5. Finance, accountants</li> <li>6. Positions in the hotels, restaurants and merchandising industry</li> </ol>
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<b>Economic related activities</b>	<ol style="list-style-type: none"> <li>1. Tourism and hospitality industry</li> <li>2. Food industry</li> <li>3. Print and media design</li> <li>4. Local food consumption</li> </ol>
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<b>Economic total value</b>	1,676.8 million baht/year (only the value of transactions related to wedding events)
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<b>Obstacles</b>	<ol style="list-style-type: none"> <li>1. Standards to prevent COVID-19 pandemic</li> <li>2. Creating confidence for tourists coming to Phuket after COVID-19 pandemic</li> </ol>
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### Phuket Private Sector Network (contributors to the white paper)

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| 1. Phuket Chamber of Commerce                | 7. Patong Hotel Association                    |
| 2. Phuket Federation of Industries           | 8. Kata-Karon Hotel Association                |
| 3. Tourism Council of Phuket                 | 9. Phuket City Development                     |
| 4. Phuket Tourist Association                | 10. Health and Wellness Phuket Spa Association |
| 5. Thai Hotels Association, Southern Chapter | 11. Andaman Guide Association                  |
| 6. Phuket Real Estate Association            |  |

## C. Links between the PDP and SDG's

Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan <small>Please refer to Figure 6 for titles of the plans</small>
<p>1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</p>	<p>1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable</p>	People	Can apply to plan 8
			
<p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p>	<p>2.1.1 Prevalence of undernourishment</p> <p>2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)</p>	People	Can apply to plan 8
			
<p>2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</p>	<p>2.4.1 Proportion of agricultural area under productive and sustainable agriculture</p>	People	Can apply to plan 2
			



Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan	
2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities	People	Can apply to plan 2,7	
	2.5.2 Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction	People	Can apply to plan 7	
	3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	People	Can apply to plan 4
3.3.2 Tuberculosis incidence per 1,000 population				
3.3.3 Malaria incidence per 1,000 population				
3.3.4 Hepatitis B incidence per 100,000 population				
3.3.5 Number of people requiring interventions against neglected tropical diseases				
				



Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan Please refer to Figure 6 for titles of the plans
3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease  3.4.2 Suicide mortality rate	People	Can apply to plan 4
			
3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders  3.5.2 Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in liters of pure alcohol	People	Can apply to plan 4
			
3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	3.6.1 Death rate due to road traffic injuries	People	Can apply to plan 9
			

Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan
4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	4.1.1 Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	People	Can apply to plan 3,8
			
4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education	4.2.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex	People	Can apply to plan 3,8
	4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex		
5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	People	Can apply to plan 9
	5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence		

Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan Please refer to Figure 6 for titles of the plans
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Proportion of population using safely managed drinking water services	Planet	Can apply to plan 7
			
7.3 By 2030, double the global rate of improvement in energy efficiency	7.3.1 Energy intensity measured in terms of primary energy and GDP	Prosperity	Can apply to plan 7
			
8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	8.1.1 Annual growth rate of real GDP per capita	Prosperity	Can apply to plan 1
			
8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead	8.4.1 Material footprint, material footprint per capita, and material footprint per GDP	Prosperity	Can apply to plan 1
			

Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan Please refer to Figure 6 for titles of the plans
9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	9.4.1 CO2 emission per unit of value added	Prosperity	Can apply to plan 7
			
10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average	10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	Prosperity	Can apply to plan 1
			
11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	11.5.1 Number of deaths, missing persons and persons affected by disaster per 100,000 people  11.5.2 Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services	Prosperity  Prosperity	Can apply to plan 9  Can apply to plan 1
			

Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan Please refer to Figure 6 for titles of the plans
<p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</p>	<p>12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement</p> <p>12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment</p>	Planet	Can apply to plan 7
			
<p>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</p>	<p>13.1.1 Number of countries with national and local disaster risk reduction strategies</p> <p>13.1.2 Number of deaths, missing persons and persons affected by disaster per 100,000 people</p>	Planet	Can apply to plan 7
			
<p>13.2 Integrate climate change measures into national policies, strategies and planning</p>	<p>13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)</p>	Planet	Can apply to plan 7
			

Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan Please refer to Figure 6 for titles of the plans
<p>14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics</p>	<p>14.4.1 Proportion of fish stocks within biologically sustainable levels</p>	Planet	Can apply to plan 2
			
<p>14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation[c]</p>	<p>14.6.1 Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing</p>	Planet	Can apply to plan 2
			

Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan Please refer to Figure 6 for titles of the plans
<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p>	<p>15.1.1 Forest area as a proportion of total land area</p> <p>15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type</p>	Planet	Can apply to plan 7
			
<p>15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally</p>	<p>15.2.1 Progress towards sustainable forest management</p>	Planet	Can apply to plan 7
			
<p>16.1 Significantly reduce all forms of violence and related death rates everywhere</p>	<p>16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age</p> <p>16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause</p> <p>16.1.3 Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months</p> <p>16.1.4 Proportion of population that feel safe walking alone around the area they live</p>	Peace	Can apply to plan 9
			



Goals and targets (from the 2030 Agenda)	Indicators	Thailand development issues	Phuket development plan <small>Please refer to Figure 6 for titles of the plans</small>
16.5 Substantially reduce corruption and bribery in all their forms  	<p>16.5.1 Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months</p> <p>16.5.2 Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months</p>	Peace	Can apply to plan 1, 9
17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection  	<p>17.1.1 Total government revenue as a proportion of GDP, by source</p> <p>17.1.2 Proportion of domestic budget funded by domestic taxes</p>	Partnership	Can apply to plan 1  Can apply to plan 1, 8, 9
17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020  	17.11.1 Developing countries and least developed countries' share of global exports	Partnership	Can apply to plan 1
17.14 Enhance policy coherence for sustainable development  	17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development	Partnership	Can apply to plan 8

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