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## ASIA HOUSE BRIEFING, JULY 2018

### THE SUSTAINABLE DEVELOPMENT GOALS



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### **The SDGs: Moving from Vision to Reality**

*Using the Sustainable Development Goals as a gateway to Thailand*

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The UN Sustainable Development Goals (SDGs) have been debated heavily since their adoption in 2015. Critics have likened them to a “high-school wish list on how to save the world”, and claim the SDGs are too vague and numerous to have any effect: they lack precision, consistency, financing, measurability and accountability.<sup>1</sup> Some of the goals – critics say – are even unrealistic and unattainable, undermining the credibility of the entire SDG-complex. The Economist, a British weekly, are especially harsh in their critique, calling the SDGs “worse than useless”, “a wasted opportunity” and “a betrayal of the world’s poorest people”.<sup>2</sup>

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<sup>1</sup> Foreign Policy (28/12-2015); *The SDGs should stand for Senseless, Dreamy, Garbled*

<sup>2</sup> The Economist (26/3-2015); *The 169 commandments*; (26/3-2015); *Unsustainable goals*

Proponents argue that the ambitious, expansive and idealistic nature of the SDGs is necessary: “They form the blueprint to go from the world we have to the world we want”.<sup>3</sup> Besides, the interrelated complexity of the goals reflects the complexity of the problems at hand. Also, the very fact that all 193 member-states have adopted the SDGs is measure of success itself: the “Global Goals are no longer about donors and recipients... they are owned by all countries, they are about leaders being accountable to their citizens”.<sup>4</sup>

This very concept of partnership is fundamental to the vision of the SDGs and imbedded in SDG # 17. The global challenges cannot be solved by governments and NGO’s alone, the private sector needs to be mobilised, with all its knowhow, financing and organisational capacity. Thus, encouraging and promoting “effective public, public-private and civil society partnerships” and creating viable business cases from the 17 SDGs and their 169 targets is seen as key to achieving the Global Goals.<sup>5</sup> According to one report, “sustainable business models could open new markets worth up to USD 12 trillion and create up to 380 million new jobs by 2030”.<sup>6</sup>

Thus, in 2016 Denmark’s Prime Minister Lars Løkke Rasmussen announced the establishment of a Danish SDG Fund, earmarking DKK 100 million to private companies investing in sustainable development: *The (SDG) fund shall focus on areas where Danish private sector is in the lead, e.g. the environment, food and health. This way we substantially contribute to the fulfillment of the SDGs as well as opening up for Danish companies in the developing countries.*<sup>7</sup> The SDG-fund is a public-private enterprise administered by The Danish Investment Fund for Developing Countries (IFU) and seeks to mobilize an additional DKK 30 billion by 2023, especially from Danish pension funds.

This Asia House report takes a closer look at the SDG vision, with Thailand as a case study. Thailand has played a pivotal role in the implementation of the SDGs in Asia. Since the mid-1970s, Thailand has nurtured and promoted its own sustainable development philosophy, the *Sufficiency Economy Philosophy* (SEP). In 2016 Thailand was assigned the role as ASEAN’s coordinator for implementing the global goals, and in November 2017, ASEAN and the EU agreed to join hands, to exchange best practices in relation to regional corporation when tackling problems such as climate change and developmental gaps. Next year, Thailand will assume the leadership of ASEAN.<sup>8</sup>

Yet the question remains: Can the SDG-framework pave way for Danish companies seeking access to the Thai market for sustainable solutions, and ultimately to motivate private investors to support the Danish SDG-fund? Or is it mainly “business as usual”?

### **A brief introduction to the SDGs**

On 25 September 2015, all 193 countries of the UN General Assembly adopted the “*Sustainable Development Goals*”, also known as the “*Global Goals for Sustainable Development*” or “*The 2030 Agenda*”.<sup>9</sup> The goals were developed to replace the Millennium Development Goals (MDGs) which ended in 2015.

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<sup>3</sup> Huffington Post (14/3-2017); *The Business case for the Sustainable Development Goals*

<sup>4</sup> World Economic Forum (30/1-2017); *Critics of the Sustainable Development Goals were wrong. Here’s why*

<sup>5</sup> SDG Goal # 17: Partnerships for the goals

<sup>6</sup> Business and Sustainable Development Commission (January 2017); *Better Business, Better World*

<sup>7</sup> GlobalNyt (21/9-2016); *Regeringen lancerer ny Verdensmålsfond*

<sup>8</sup> ASEAN Information Center (4/10-2016); *Thailand as coordinator for ASEAN-UN SDGs*. Bangkok Post (2/1-2018); *Thailand prepares to show ASEAN leadership*

<sup>9</sup> The formal name is: Transforming our world: the 2030 Agenda for Sustainable Development

According to the UNDP, the “SDGs... are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The SDGs build on the successes of the MDGs, while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice”.<sup>10</sup> Unlike the MDGs, that only covered developing countries, the SDGs apply to all countries, and must be reached by 2030.

The SDGs consist of 17 goals, each representing a major global challenge: Eradicate poverty, end hunger, provide basic health care, education and clean water. The goals are detailed by 169 specific targets, each of which have 1 and 3 indicators to measure progress toward reaching the targets. In total, there are 304 indicators that measure compliance.

The level of detail and measurability varies between the targets. According to one study, only 29 % of the targets were “well developed” while the remaining “should be more specific” (54 %) or “require significant work” (17 %).<sup>11</sup>

Relevant for this investigation is a closer look at the strategies for implementing the SDGs, namely:

1. **Private sector involvement:** According to the UN, achieving the SDGs will require annual investments of USD 3.9 trillion, yet currently investments amounts only to USD 1.4 trillion. Achieving the SDGs therefore rely heavily on private investments.
2. **National implementation:** Each country must develop a national plan that contributes to achieving the SDGs in relation to national challenges. As such, each country will have a unique SDG framework, and understanding the local context is key to accessing a given market based on the SDGs.

### Mobilising the private sector

According to the report *Better Business, Better World* “the business case for sustainable development is strong already: it opens up new opportunities and big efficiency gains; it drives innovation; and it enhances corporate image. With a reputation for sustainability, companies attract and retain employees, consumers, B2B customers and investors, and they secure their licence to operate”.<sup>12</sup>

These claims are substantiated by numerous reports. According to PwC, millennials – who will account for two thirds of the workforce by 2025 – are five times more likely to stay with employers when they feel a strong connection with their employer’s purpose.<sup>13</sup> Another study found a 21 % productivity increase with employees that feel a strong connection with their employer’s purpose.<sup>14</sup>

Perhaps the strongest business case for corporate involvement is the estimated USD 12 trillion spin-offs in business savings and revenue linked to attaining the Global Goals. 50 % of these earnings are expected to materialise in the developing countries. The report specifies 60 “market hot spots” across the 17 SDGs, divided within four general sectors: Food & Agriculture, Cities, Energy & Materials, Health & Well-being.<sup>15</sup>

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<sup>10</sup> [www.undp.org](http://www.undp.org). See appendix 1 for a list of the SDGs

<sup>11</sup> International Council for Sciences (2015); *Review of the targets for the sustainable development goals: The Science perspective*

<sup>12</sup> Business and Sustainable Development Commission (January 2017); *Better Business, Better World*

<sup>13</sup> Price Waterhouse Coopers (June 2016); *Putting Purpose to Work: A study of purpose in the workplace*

<sup>14</sup> Society for Human Resource Management (2011); *Advancing Sustainability: HR’s Role*

<sup>15</sup> Business and Sustainable Development Commission (January 2017); *Better Business, Better World*

Transforming SDGs into business opportunities is also central to Sustainia, a Danish sustainability research institute and consultancy. Sustainia provides a *Global Opportunity Explorer* platform, that lists hundreds of sustainable solutions being implemented world-wide. The platform seeks to inspire companies towards working with the SDGs, and help business leaders, entrepreneurs and investors connect with like-minded partners.

Furthermore, Sustainia publishes the *Global Opportunity Report* on how global challenges can be turned into sustainable business opportunities that are both financially viable and scalable. In 2018, the report defined 10 specific business opportunities from four select SDGs seen as lagging on a global level: # 10 Reduced inequality, # 12 Responsible consumption and production, # 13 Climate action, # Life below water.<sup>16</sup>

However, the business opportunities are generally described in very abstract terms, e.g.: ***Keeping it Cool: New innovative and energy-efficient methods for cooling everything from homes to data centres provides significant possibilities to reduce carbon emissions and improve living conditions for billions of people.***

This perhaps reflects a systemic weakness of the SDG-concept.

Firstly, on a fundamental level, providing solutions to global problems is good business, with or without the SDGs. If there is a market opportunity, private enterprise will follow. Secondly, the 17 SDGs and 169 targets, and even the business opportunities presented by organizations like Sustainia, are very abstract and therefore cannot themselves provide basis for innovation and implementation. Bringing products to market is a highly complex process, not just in terms of technological development and innovation, but also in relation to market access and adaptation, sales and distribution, patent rights. Thus, critics argue that while the SDGs may provide a common framework and language for addressing global sustainability issues, they hardly constitute a driver for solving global issues on a specific B2B-level.

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<sup>16</sup> Sustainia (2018); *Global Opportunity Report*

## SDGs in Thailand – the official perspective

A basic premise for implementing the SDGs is their inclusion into national policies, plans and strategies: “each country needs to take into account their national realities and circumstances, and hence no one size fits all countries in regard to the mainstreaming process”.<sup>17</sup>

The national implementation of the SDGs in Thailand has two aspects. One aspect is based on Thailand’s Sufficiency Economy Philosophy (SEP) formulated by the late King Bhumibol Adulyadej in the mid-1970s. The SEP emphasises self-reliance and builds on three core principles of *moderation*, *reasonableness* and *prudence*.<sup>18</sup>

A large proportion of sustainable development in Thailand takes place within this framework, often as small-scale, community-based projects that seek to promote simple living with local resources. Very much in line with the general SEP ideology of self-sufficiency, the agency in charge of these projects, the *Office of the Royal Development Board*, does not collaborate with international companies.

Nonetheless, a basic understanding of SEP is an advantage to any company seeking to engage in sustainable development in Thailand. Foreign-based stakeholders in Thailand claim that if you begin the conversation with a reference to the SEP or in any other way show that you understand the philosophy and the importance attached to it, you immediately gain a respect that you can leverage in many ways.

The other aspect of sustainable development in Thailand is integrated with national policies and official institutions, especially the *National Committee for Sustainable Development* (NCSD), chaired by the Prime Minister. Accordingly, the SDGs must be aligned “with government policies, the 20-year National Strategy, the 12<sup>th</sup> National Economic and Social Development Plan (Thailand’s latest 5-year plan), the structural reform agenda, and the Thai Government Roadmap Phase II-III”.<sup>19</sup>

Yet, the relevance of these plans and strategies vary in relation to SDG-implementation. Of lesser importance seems to be the latest 5-year plan. Though it defines several targets for national development and indicators for measurement, it contains no actual project pipelines, and is not thoroughly integrated with the SDG-framework. More relevant, perhaps, is the 20-year National Strategy Plan, and most relevant, the national economic reform program called *Thailand 4.0*.

However, the level of transparency remains low, especially for non-Thai speakers. The work of the NCSD and the implementation of the SDGs (including tenders and budgets) is not readily available. The 20-year National Strategy and the SDG roadmaps are only published in Thai, as are most official websites (though many official websites offer English versions, their content is usually limited).<sup>20</sup>

Furthermore, establishing contact with and achieving specific information from officials can be difficult. These limitations impact the findings of this report and the perspectives from Thai academia.

Perhaps the best source of information in relation to Thailand’s official SDG approach is the UNDP office in Bangkok, that works closely with the government on various parts of the official sustainable development strategy. The UNDP assists the NCSD in localizing the SDGs to provincial, district and community level, ensuring the roadmaps are aligned with local challenges. Lastly, the UNDP advise the

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<sup>17</sup> Sustainable Development Knowledge Platform (13/7-2016); *Mainstreaming SDGs into national policies, plans and strategies and integrating the three dimensions of sustainable development*

<sup>18</sup> For further information on the SEP, see appendix 2

<sup>19</sup> *The Twelfth National Economic and Social Development Plan (2017-2021)*, Office of the National Economic and Social Development Board, Office of the Prime Minister, Bangkok, Thailand

<sup>20</sup> See appendix 5 for list of publications and availability

NCSO on assessing the cost of achieving the SDGs in Thailand, possible means of financing and regulatory changes needed to facilitate these investments.

The roadmaps consist of short, medium and long-term strategies. The short-term strategies are projects already allocated in the government budgets. Medium-term strategies are less precise but give an indication of the road ahead. Long-term strategies are mostly headlines or thematic overviews. These roadmaps can be requested from the UNDP office.

### **SDGs in Thailand – the civil society perspective**

Civil Society Organisations (CSO) in Thailand are decentralised and informal as registration is not compulsory. A significant proportion of local CSOs with a sustainable development agenda is linked to initiatives and projects developed within the SEP framework. International CSOs in Thailand are very integrated in the sustainable development agenda and undertake successful partnership projects and outreach programs as well as advise and collaborate with government agencies.

The UNDP has undertaken several social innovation challenges in Thailand and is now working with the Thai government on the development of a social innovation service platform. The platform intends to empower and catalyse Thai youth to find solutions to national sustainable development priorities through multi-stakeholder cooperation. They also engage in partnerships with the Thai private sector which, combined with their close relationship to the public sector, the local entrepreneur community and their knowledge of the public procurement processes, makes them a valuable partner and a clear point of departure for entering the Thai market.

The *International Union for Conservation and Nature* (IUCN) and *World Wildlife Fund* (WWF) are also present in Thailand. Both are actively seeking partnerships with private companies, foreign and national, in the framework of the SDGs, with focus on their respective strengths. They consider the perfect partnership to include co-contribution in terms of resources and a long-term commitment.

Both organizations offer to assist companies with understanding, developing and implementing SDG strategies, leveraging their broad network and local know-how. The IUCN specifically stress their strong scientific base as their greatest asset and promised that Danish companies entering a partnership with the IUCN could rely on their knowledge and network.

### **SDGs in Thailand – the corporate perspective**

According to the Dow Jones Sustainability Index (DJSI), Thai companies – especially the large companies listed on the Stock Exchange of Thailand (SET) – are successfully moving towards sustainability. Thus, 17 listed Thai companies (see below) were selected for the DJSI 2017, the highest number of inclusions and additions among ASEAN countries in Emerging Markets.<sup>21</sup>

- Airports of Thailand
- Banpu
- Charoen Pokphand Foods
- Central Pattana

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<sup>21</sup> The Stock Exchange of Thailand (11/9-2017); *Thai listed firms mark top inclusions in DJSI among ASEAN, largest additions in emerging markets* (news release)

- IRPC
- Kasikornbank
- Minor International
- PTT Exploration and Production
- PTT Global Chemical
- Siam Cement
- Thai Oil (earned the top score in Energy Industry Group for the 4<sup>th</sup> consecutive year)
- Thai Union Group
- CP All
- Home Product Center
- Indorama
- Ventures
- True Corporation

The United Nation's Global Compact has recently launched a local network in Thailand, aiming to promote UN Global Compact principles among the Thai private sector, including ethical business management. The network is run by renowned Thai CSR and business man Dr. Netithorn Praditsarn, who is pleased to invite Danish companies to the network and assist with information. The network currently counts 42 participants, 16 of which are found to work with sustainability and seven which use SDGs as a reporting tool.<sup>22</sup> This network is probably the best entry point for Danish companies wanting to engage in sustainable development in Thailand.

### **Business as usual?**

The purpose of this report is to determine to what extent the SDG-framework could be used as a market platform for Danish companies seeking access to Thailand. The answer depends on the approach.

The public-sector approach is perhaps the least viable route for Danish companies. Firstly, the official policy is generally based on the SEP philosophy, that favours self-sufficiency and community-based activities driven by locals. Secondly, formalized state policies, including specific projects and tenders, are quite difficult to access.

Despite these challenges, public sector sustainable development is taking place in Thailand, especially in relation to renewable energy, greenhouse gas emission reduction and climate disaster mitigation. The main driver of this development is the Ministry of Natural Resource and Environment and the Thai Green Gas Management Organisation, the latter of which has a procurement section available in English. Both the Asian Development Bank and the Global Environment Facility are also assisting Thailand on several sustainable development projects, the former of which, at the time of writing, has a substantial number of tenders out.

Approaching these tenders is a different matter and may be impaired by lack of transparency and economic issues. However, the Public Procurement Law has recently been redrafted in collaboration with the UNDP, giving access to public tenders via an online platform, [www.gprocurement.go.th](http://www.gprocurement.go.th), though entirely in Thai (as must be the applications).

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<sup>22</sup> See appendix 4 for a list of companies in United Nation's Global Compact network Thailand



The new procurement law now follows international standards and has a proven track record of lower corruption, making it easier for foreign companies to bid on public tenders in Thailand. However, applying for tenders via the procurement system requires – as a legal prerequisite – a Thai partner.

Accessing the Thai market via civil societies is perhaps more effective, especially large, international organisations like the *International Union for Conservation and Nature* (IUCN) and *World Wildlife Fund* (WWF) with a firm SDG-strategy. The CSOs are usually skilled at building partnerships between a wide range of stakeholders, both public and private, leveraging on their local connections and knowhow.

Finally, accessing the market via partnerships with relevant Thai companies is also an option. However, the question remains whether the SDGs provide an added impetus: Can the 17 goals and 169 targets provide the basis for *actual* product innovations and export? Large companies may have an explicit SDG-policy (just as they have a CSR-policy) and may even map their solutions to the SDG-framework. But very few companies seem to perceive the SDGs as a fundamental driver for product inspiration and innovation.

Two facts remain – and one conclusion: The demand for sustainable solutions is expanding rapidly and the market opportunities are enormous, not just in Thailand but all over the world. The SDGs provide a comprehensive framework for communication, and a high-level target “for the world we want”. An operational platform for export activities to emerging markets is, however, also required to be successful.





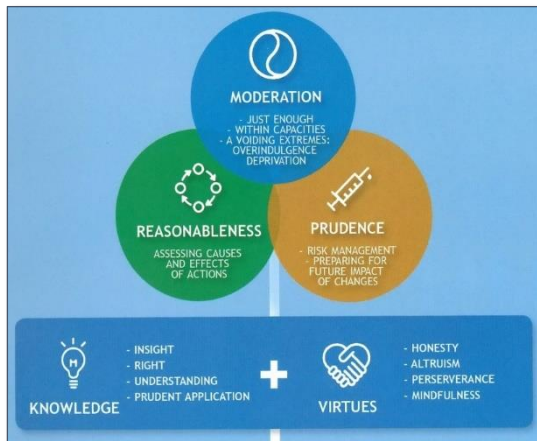
## Appendix 1: The 17 goals

1. **End poverty** in all its forms everywhere
2. **End hunger**, achieve food security and improved nutrition and promote sustainable agriculture
3. **Ensure healthy lives** and promote well-being for all at all ages
4. **Ensure inclusive and equitable quality education** and promote lifelong learning opportunities for all
5. **Achieve gender equality** and empower all women and girls
6. Ensure availability and sustainable management of **water and sanitation for all**
7. Ensure access to affordable, reliable, **sustainable and modern energy for all**
8. Promote sustained, inclusive and **sustainable economic growth**, full and **productive employment and decent work for all**
9. **Build resilient infrastructure**, promote inclusive and sustainable industrialization and foster innovation
10. **Reduce inequality** within and among countries
11. **Make cities and human settlements inclusive**, safe, resilient and sustainable
12. Ensure **sustainable consumption and production patterns**
13. Take urgent action to **combat climate change** and its impacts
14. **Conserve and sustainably use the oceans**, seas and marine resources for sustainable development
15. Protect, restore and **promote sustainable use of terrestrial ecosystems**, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16. **Promote peaceful and inclusive societies** for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and **revitalize the global partnership for sustainable development**

## Appendix 2: Thailand's Sufficiency Economy Philosophy (SEP)

The SEP provides the basis for Thailand's national SDG implementation as formulated in the official *SEP for SDG'-strategy*. The SEP is the ideological compass for sustainable development in Thailand.

The SEP was conceived in the mid-1970s by the late King Bhumibol Adulyadej and is based on the three core principles of *moderation*, *reasonableness* and *prudence*. During the Asian Financial Crisis in 1997, the philosophy was formalized, and in 2006 His Royal Highness was granted the first ever UNDP Human Development Lifetime Achievement Award for the development work undertaken in accordance with this philosophy.



The SEP has caused considerable debate and attention. Firstly, Thailand has actively been promoting the SEP to other developing countries in Asia. Indeed, the SEP has become increasingly attractive in the South-South and triangular cooperation.<sup>23</sup> Secondly, the SEP has often been framed as an alternative to global capitalism and excessive consumerism, giving rise to policies that

imposed exchange controls and limiting foreign capital. Finally, the philosophy's strong ties to the recently deceased king, H.E. Bhumibol Adulyadej has resulted in a re-blossoming of the philosophy in the public sphere.

Information regarding the SEP and how Thailand uses SEP for SDG implementation is plentiful. *Thailand's Sustainable Development Foundation (TSDf)* – the central platform for SEP promoted projects – has published three books concerning Sustainable Development in Thailand, with SEP as the recurring theme: *Thailand's Sustainable Business Guide*, *Thailand's Sustainable Development Sourcebook*, and *A Call to Action: Thailand and the Sustainable Development Goals*.

Of these, the latter – *A Call to Action* – provides the best insights, including a very candid evaluation on Thailand's progress towards the SDGs, highlighting not just the successes, but also the failures and challenges of the policies.

*"In addressing a challenge, one should first analyse its root cause by utilising **reasonableness**. Once the core issues have been identified, the selection and application of potential solutions require **moderation**. **Prudence** is then needed to manage risk and develop resilience to future uncertainties. Ancillary to the application of the aforementioned components are **knowledge** and **morality**. Knowledge can be gained from basic education and is a precondition for selecting the most appropriate solutions."*

<sup>23</sup> Note: The South-South cooperation is a process where two or more developing countries cooperate in achieving individual or shared national development objectives. In Triangular cooperation the South-South cooperation is supported by one or more developed countries or multilateral organization(s).

## Appendix 3: Thailand's SDG performance by indicator

Indicator	Value	Rating	Indicator	Value	Rating
<b>SDG1</b>					
Poverty headcount ratio at \$1.90/day (% population)	0	●	Quality of overall infrastructure (1= extremely underdeveloped; 7= extensive and efficient by international standards)	4	●
Projected poverty headcount ratio at \$1.90/day in 2030 (% population)	0	●	Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high)	3.2	●
<b>SDG2</b>			QS University Ranking, Average score of top 3 universities (0-100)	38.2	●
Prevalence of undernourishment (% population)	7.4	●	Number of scientific and technical journal articles (per capita)	0.1	●
Prevalence of stunting (low height-for-age) in children under 5 years of age (%)	16.3	●	Research and development expenditure (% GDP)	0.5	●
Prevalence of wasting in children under 5 years of age (%)	6.7	●	<b>SDG10</b>		
Prevalence of obesity, BMI ≥ 30 (% adult population)	8.5	●	Gini index (0-100)	37.9	●
Cereal yield (t/ha)	3.1	●	<b>SDG11</b>		
Sustainable Nitrogen Management Index	0.9	●	Annual mean concentration of particulate matter of less than 2.5 microns of diameter (PM2.5) in urban areas (µg/m <sup>3</sup> )	25.8	●
<b>SDG3</b>			Improved water source, piped (% urban population with access)	75.9	●
Maternal mortality rate (per 100,000 live births)	20	●	<b>SDG12</b>		
Neonatal mortality rate (per 1,000 live births)	6.7	●	Municipal Solid Waste (kg/year/capita)	1.8	●
Mortality rate, under-5 (per 1,000 live births)	12.3	●	E-waste generated (kg/capita)	6.4	●
Incidence of tuberculosis (per 100,000 people)	172	●	Percentage of anthropogenic wastewater that receives treatment (%)	11.5	●
HIV prevalence (per 1,000)	0.3	●	Production-based SO <sub>2</sub> emissions (kg/capita)	8.4	●
Age-standardised death rate due to cardiovascular disease, cancer, diabetes, and chronic respiratory disease in populations age 30–70 years, per 100,000 population	16.2	●	Net imported SO <sub>2</sub> emissions (kg/capita)	-0.6	●
Age-standardised death rate attributable to household air pollution and ambient air pollution, per 100,000 population	6.5	●	Reactive nitrogen production footprint (kg/capita)	31.4	●
Traffic deaths rate (per 100,000 people)	36.2	●	Net imported emissions of reactive nitrogen (kg/capita)	-30.3	●
Healthy Life Expectancy at birth (years)	66.8	●	<b>SDG13</b>		
Adolescent fertility rate (births per 1,000 women ages 15-19)	44.6	●	Energy-related CO <sub>2</sub> emissions per capita (tCO <sub>2</sub> /capita)	4.5	●
Proportion of births attended by skilled health personnel	99.6	●	Imported CO <sub>2</sub> emissions, technology-adjusted (tCO <sub>2</sub> /capita)	-0.5	●
Percentage of surviving infants who received 2 WHO-recommended vaccines (%)	99	●	Climate Change Vulnerability Index	0.2	●
Universal Health Coverage Tracer Index (0-100)	68.2	●	<b>SDG14</b>		
Subjective Wellbeing (average ladder score, 0-10)	6.1	●	Mean area that is protected in marine sites important to biodiversity (%)	na	●
<b>SDG4</b>			Ocean Health Index - Biodiversity (0-100)	85.2	●
Net primary enrolment rate (%)	90.8	●	Ocean Health Index - Clean Waters (0-100)	54.2	●
Expected years of schooling (years)	7.9	●	Ocean Health Index - Fisheries (0-100)	62.4	●
Literacy rate of 15–24 year olds, both sexes (%)	98.6	●	Percentage of Fish Stocks overexploited or collapsed by EEZ (%)	43	●
<b>SDG5</b>			<b>SDG15</b>		
Estimated demand for contraception that is unmet (% women married or in union, ages 15–49)	9.2	●	Mean area that is protected in terrestrial sites important to biodiversity (%)	71.7	●
Ratio of female to male mean years of schooling of population age 25 and above	93.8	●	Mean area that is protected in freshwater sites important to biodiversity (%)	43.6	●
Ratio of female to male labor force participation rate	79.8	●	Red List Index of species survival (0-1)	0.8	●
Proportion of seats held by women in national parliaments (%)	6.1	●	Annual change in forest area (%)	6.4	●
<b>SDG6</b>			Imported biodiversity impacts (species lost per million people)	0.1	●
Access to improved water source (% population)	97.8	●	<b>SDG16</b>		
Access to improved sanitation facilities (% population)	93	●	Homicides (per 100,000 people)	3.9	●
Freshwater withdrawal as % total renewable water resources	13.1	●	Prison population (per 100,000 people)	398	●
Imported groundwater depletion (m <sup>3</sup> /year/capita)	2.9	●	Proportion of the population who feel safe walking alone at night in the city or area where they live (%)	68	●
<b>SDG7</b>			Government Efficiency (1-7)	3.5	●
Access to electricity (% population)	100	●	Property Rights (1-7)	3.8	●
Access to non-solid fuels (% population)	75.9	●	Proportion of children under 5 years of age whose births have been registered with a civil authority, by age (%)	99.4	●
CO <sub>2</sub> emissions from fuel combustion / electricity output (MtCO <sub>2</sub> /TWh)	1.5	●	Corruption Perception Index (0-100)	35	●
<b>SDG8</b>			Slavery score (0-100)	50	●
Adjusted GDP Growth (%)	4.8	●	Transfers of major conventional weapons (exports) (constant 1990 US\$ million per 100,000 people)	0	●
Percentage of children 5–14 years old involved in child labor	8.3	●	<b>SDG17</b>		
Adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider (%)	82.3	●	Government Health and Education spending (% GDP)	10.7	●
Unemployment rate (% total labor force)	0.6	●	For high-income and all OECD DAC countries: International concessional public finance, including official development assistance (% GNI)	na	●
<b>SDG9</b>			For all other countries: Tax revenue (% GDP)	16.5	●
Proportion of the population using the internet (%)	39.3	●	Tax Haven Score (best 0-5 worst)	0	●
Mobile broadband subscriptions (per 100 inhabitants)	75.3	●			

## Appendix 4: Global Compact Network Thailand

Company	Sector	Employees	SDG?
Charoen Popkhand Foods (CP Group)	Food and Agriculture	10000	SDG
True Cooperation (CP Group)	Telecommunications	20000	SDG
Von Budit	Natural Rubber Manufacturer	6500	No SDG
Midas Aquaponics	Aquaculture & Farming	14	No SDG
Energy Thai Trading Hubs	Consultancy	10	No SDG
Thai Union	Seafood	46000	SDG
Print City	Printing	25	No SDG
Soneva	Tourism	950	SDG
Thaipat Institute	NGO Sustainable Dev.	15	SDG
Thai Oil Group	Refinery	748	SDG
Mainstay Property Solutions & Security Services	Multi-service provider	350	No SDG
The International Thai Foundation	NGO	18	No SDG
Petroleum Authority of Thailand	Gas and Oil	4660	Some SDG
SCG	Cement	54000	SDG
IRPC	Petroleum & Petrochemical	5400	Some SDG
Bangchak	Refinery & Solar Power	1100	SDG

## Appendix 5: Websites and written material:

- *Thailand 4.0*: Official document not readily available. Infographic available.<sup>24</sup>
- *20-Year National Strategy*: Published in Thai, but English synopsis translation can be requested from Asia House.
- *Draft National Strategy (6 areas) and National Reform Plan (11 areas)*. Available in Thai.
- *12th National Economic and Social Development Plan*: Available in English.
- *SDG Road Maps*: Not readily available. Published in Thai and can be requested from the UNDP Bangkok office
- *New Public Procurement Law*: Seemingly published early 2017 in the Thai Royal Gazette, which is only in Thai.
- *NCSD*: Website not readily available. Presentation of their work and structure is available on <http://www.unescap.org/resources/session-1-regional-perspective-priorities-and-challenges-urgency-action-perspective-users>.

<sup>24</sup> [http://www.thaitradeusa.com/home/wp-content/uploads/2016/09/infographic-TH4.0\\_en.jpg](http://www.thaitradeusa.com/home/wp-content/uploads/2016/09/infographic-TH4.0_en.jpg)