

Thailand's Pulp & Paper Industry

**by Mr. Pornchai Vittayakoonsakulchai
President of TPPIA**

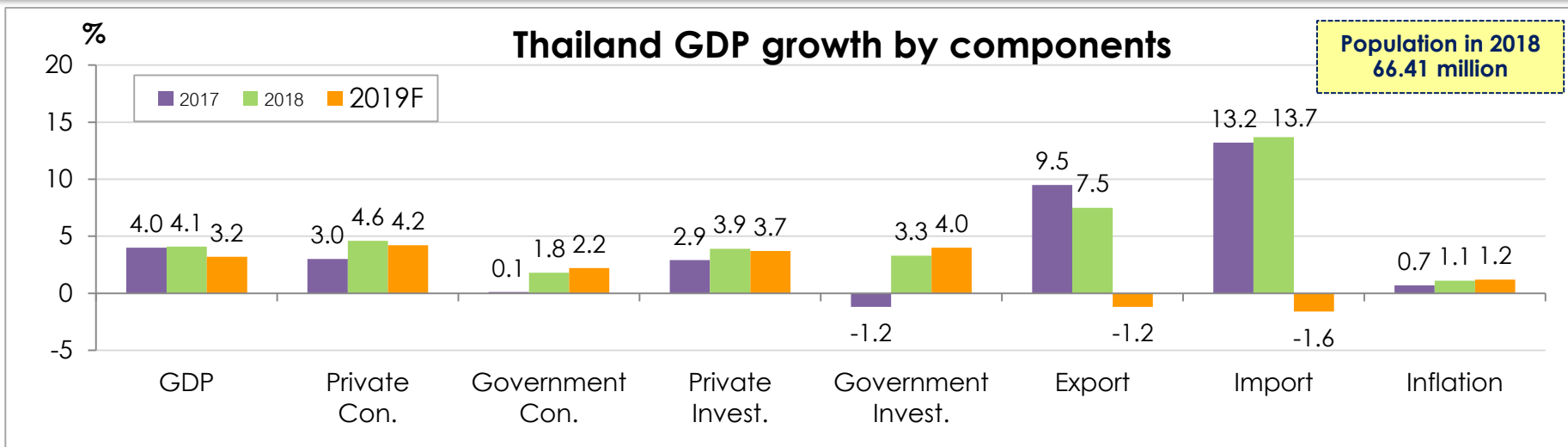


- ***Economic Outlook***
- *Pulp and Paper Industry Outlook*
- *Challenges for Thai Pulp and Paper Industry*



Economic Growth

- Tourism, Investment and Spending from both Government & Private Sectors are key drivers of Thai economic growth in 2019.



Supporting Factors



Continued investment in government's megaprojects



Relocation to Thailand of foreign firms affected by the US-China trade war



Expansion in household consumption in line with gradual income recovery



Government measures for low-income individuals



Resumed expansion in the number Chinese tourists in Thailand

Risk Factors



Slowdown in global trade following softened economic growth in major countries



Risks from the ongoing trade war between the US and China



Political uncertainties in major regions, especially the US and Europe



Impact of tightening global financial conditions on emerging markets' financial stability



Risk from high household debt



Sluggish recovery of SMEs in certain industries



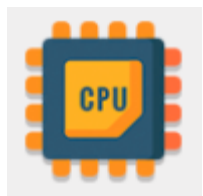
The Eastern Economic Corridor (EEC)

- Government approved 5 large infrastructure projects in EEC area, worth THB 695 billion in total, thus help boost both public and private investment.

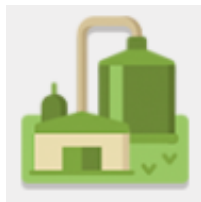
10 keys industries identified as new-growth engines and promoted in EEC area



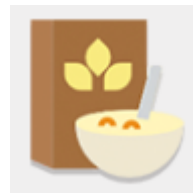
The Next-Generation Automotive Industry



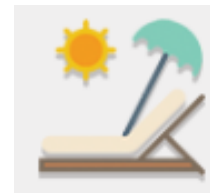
The Intelligent Electronics Industry



The Advance Agriculture and Biotechnology



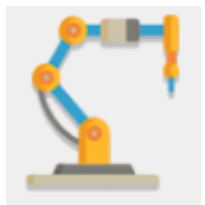
The Food Processing Industry



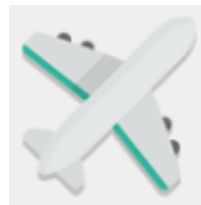
High Wealth and Medical Tourism Industries



Digital Industry



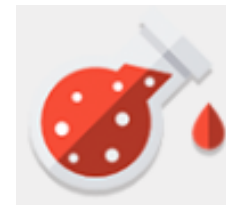
The Robotics Industry



Aviation and Logistics Industry



Comprehensive Healthcare Industry



Biofuel and Biochemical Industries



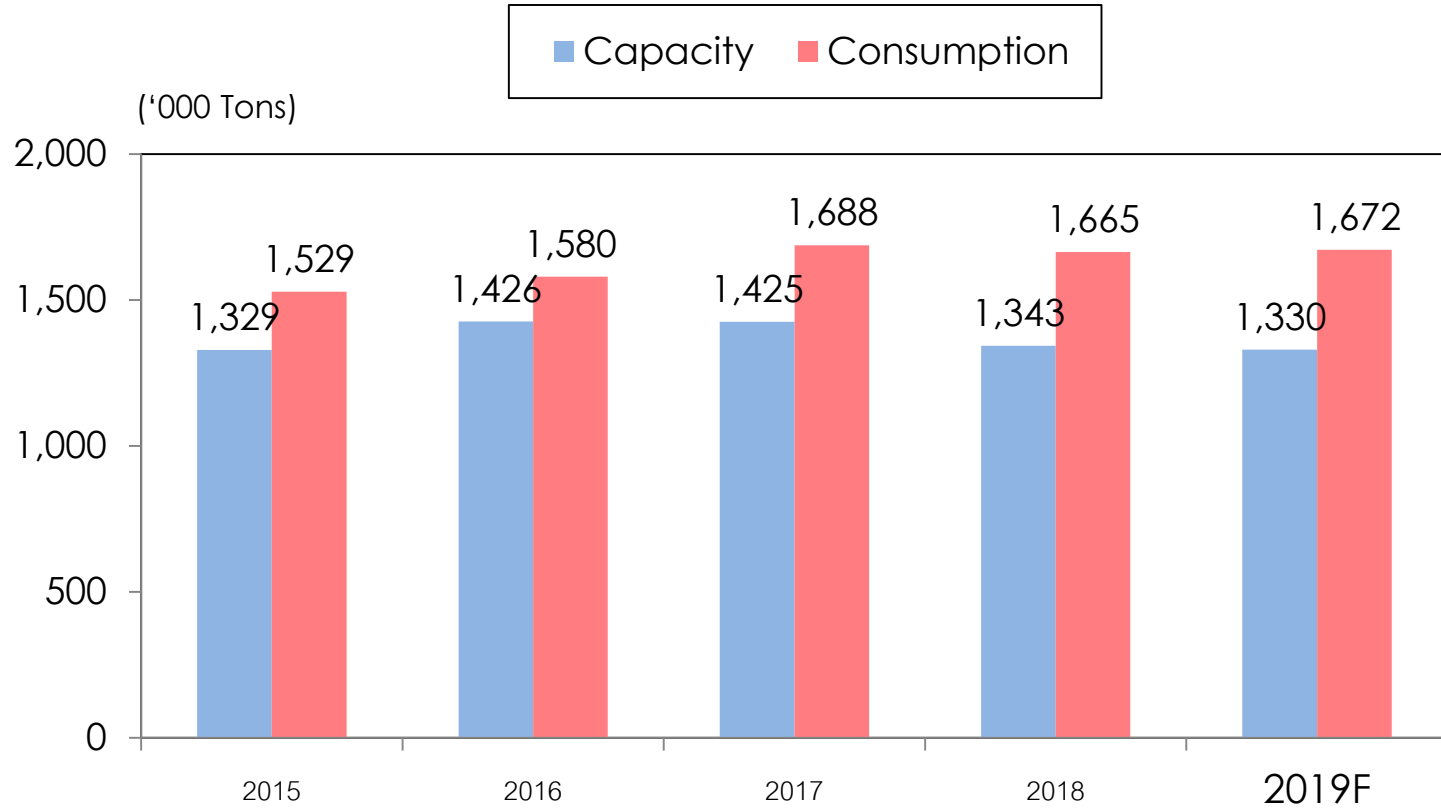


- *Economic Outlook*
- ***Pulp and Paper Industry Outlook***
- *Challenges for Thai Pulp and Paper Industry*



Pulp Capacity & Consumption

- Pulp in Thailand mainly derives from Eucalyptus
- Slow growth in pulp demand; less than +2% per annum

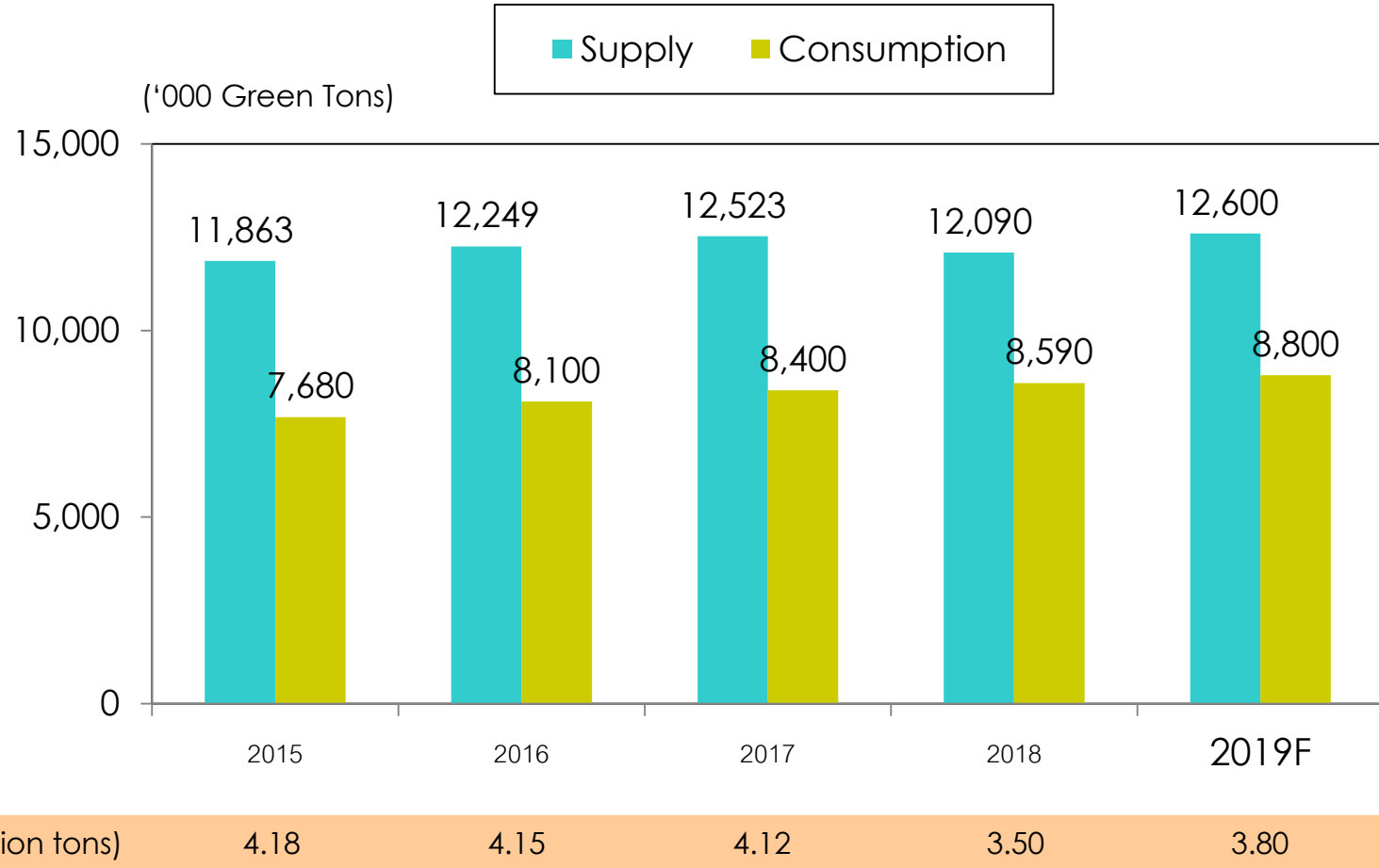


Utilization	2015	2016	2017	2018	2019F
	85%	82%	86%	95%	99%



Eucalyptus Wood Supply & Consumption

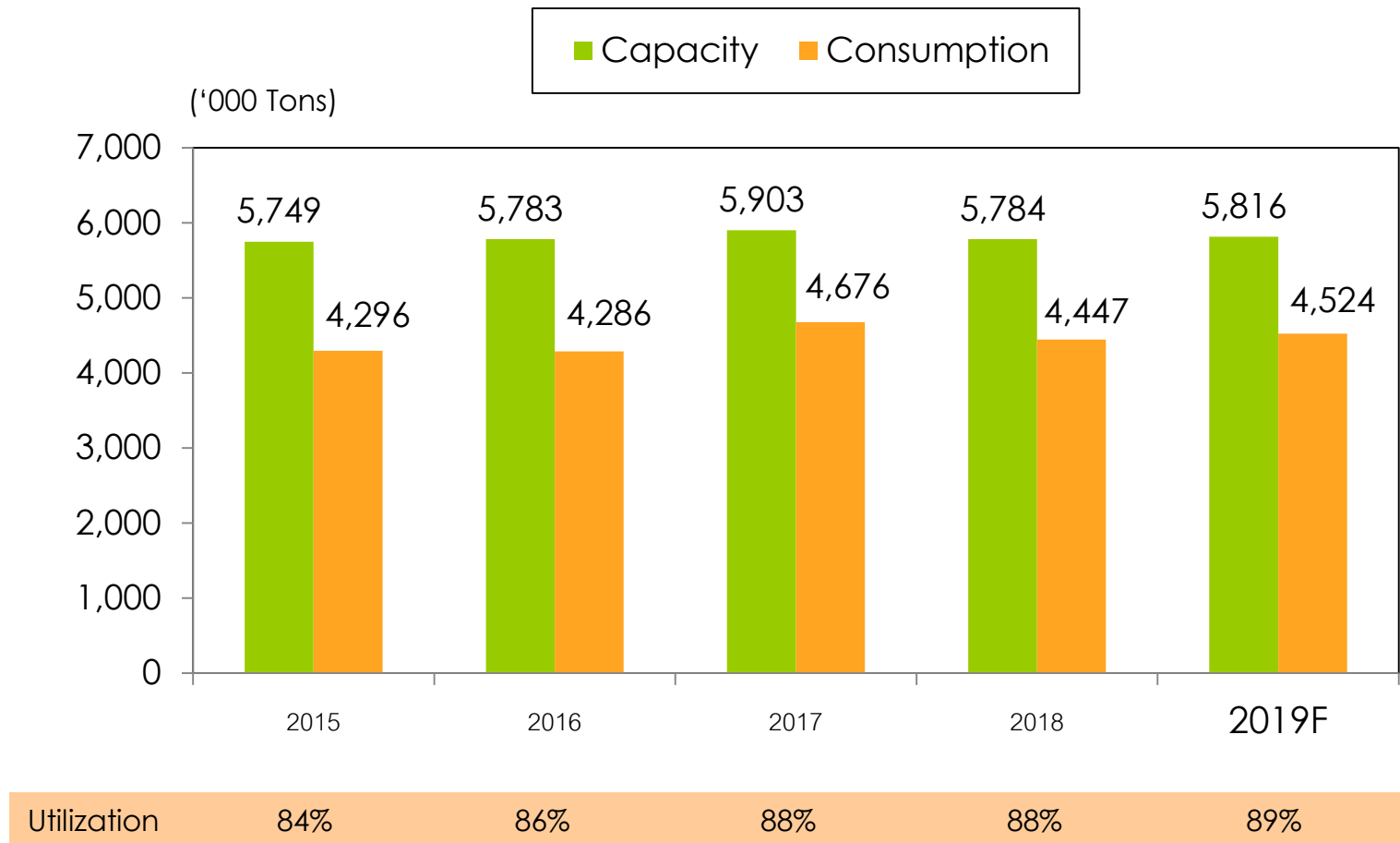
- Eucalyptus Wood Supply ~ 12 million tons per year
- Consumption ~ 9 million tons, with growth +2% per annum





Paper Capacity & Consumption

- Capacity ~ 5.8 million tons; Consumption ~ 4.5 million tons
- Growth +3% per annum for packaging paper



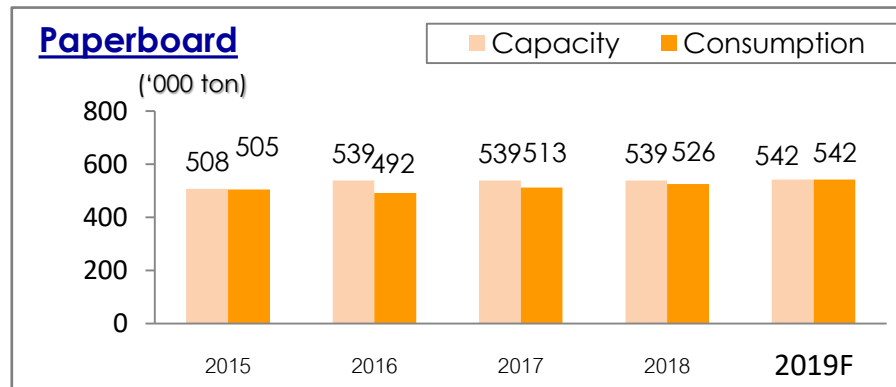
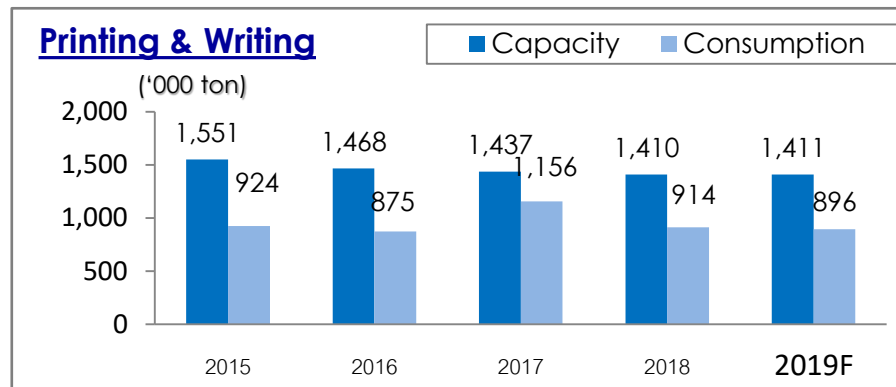
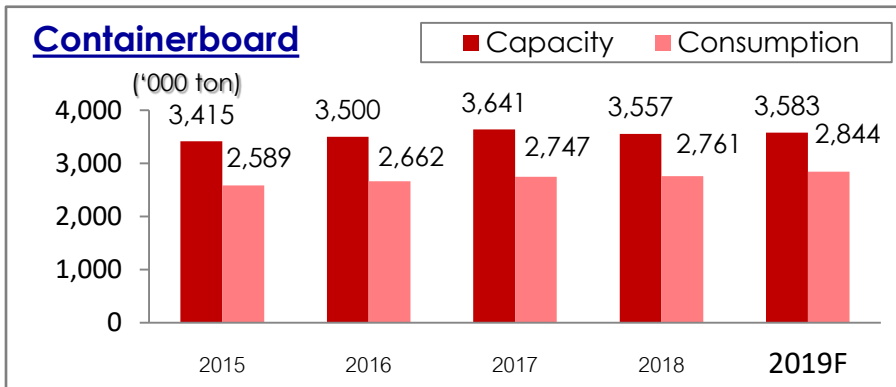
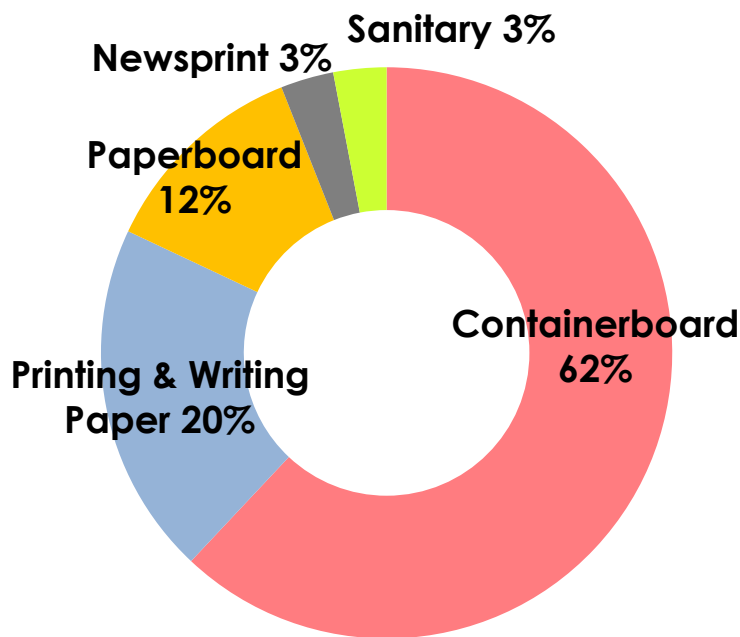


Paper Consumption by Category

- Paper for industrial use accounted for ~ 74% of total demand
- Trend of application for food container e.g. street food, food delivery

Paper consumption per capita in 2018
= 67 kg.

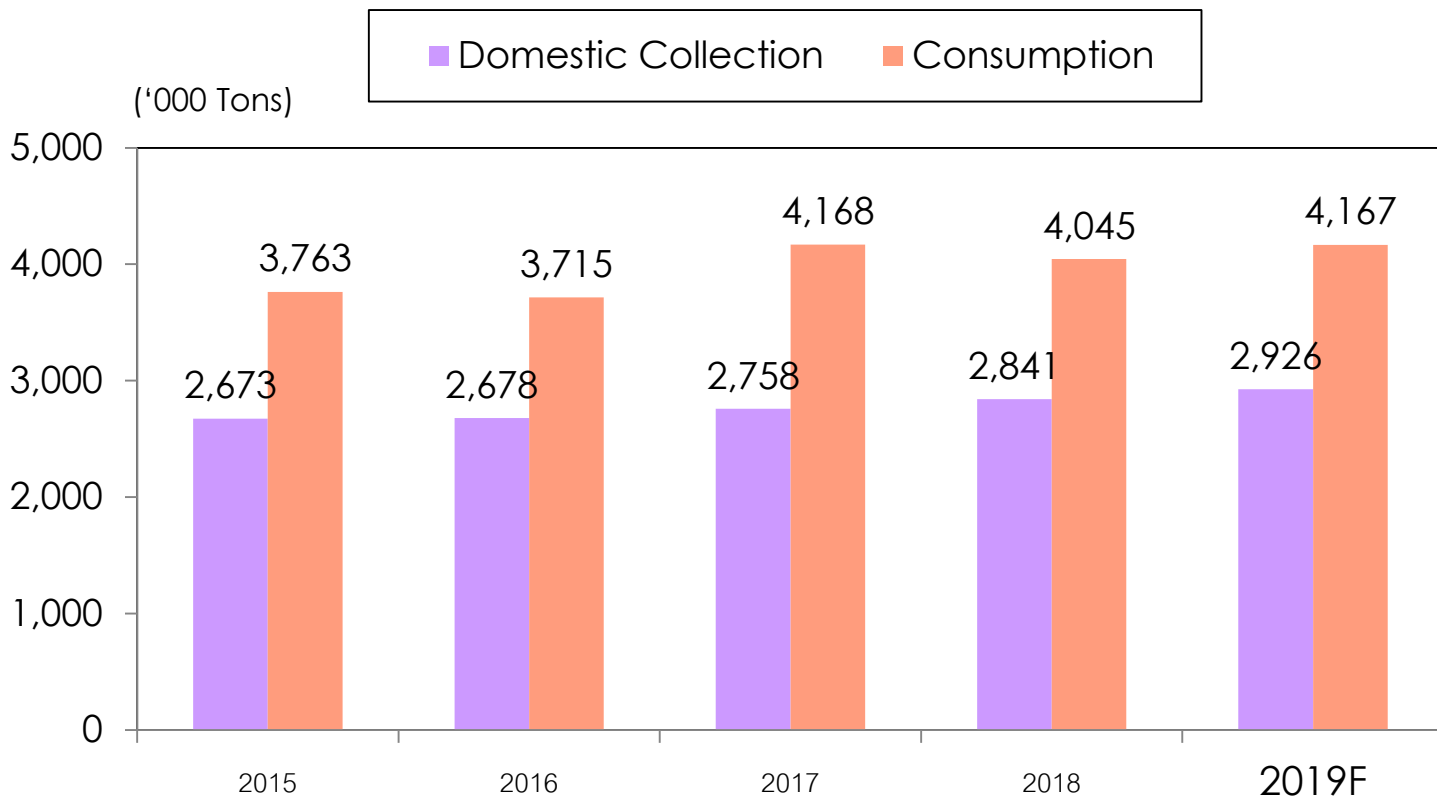
Total consumption in 2018
= 4.4 million tons





Recovered Paper Consumption

- Imported RCP represents 33% of the consumption (~1.4 million tons)
- Consumption growth rate +3% per annum



Recovery Rate	2015	2016	2017	2018	2019F
	62%	62%	59%	64%	65%



- *Economic Outlook*
- *Pulp and Paper Industry Outlook*
- ***Challenges for Thai Pulp and Paper Industry***



Global Challenge

- All industries move towards Sustainable Development Goals.
- Climate issue appears to be the most impactful SDG.





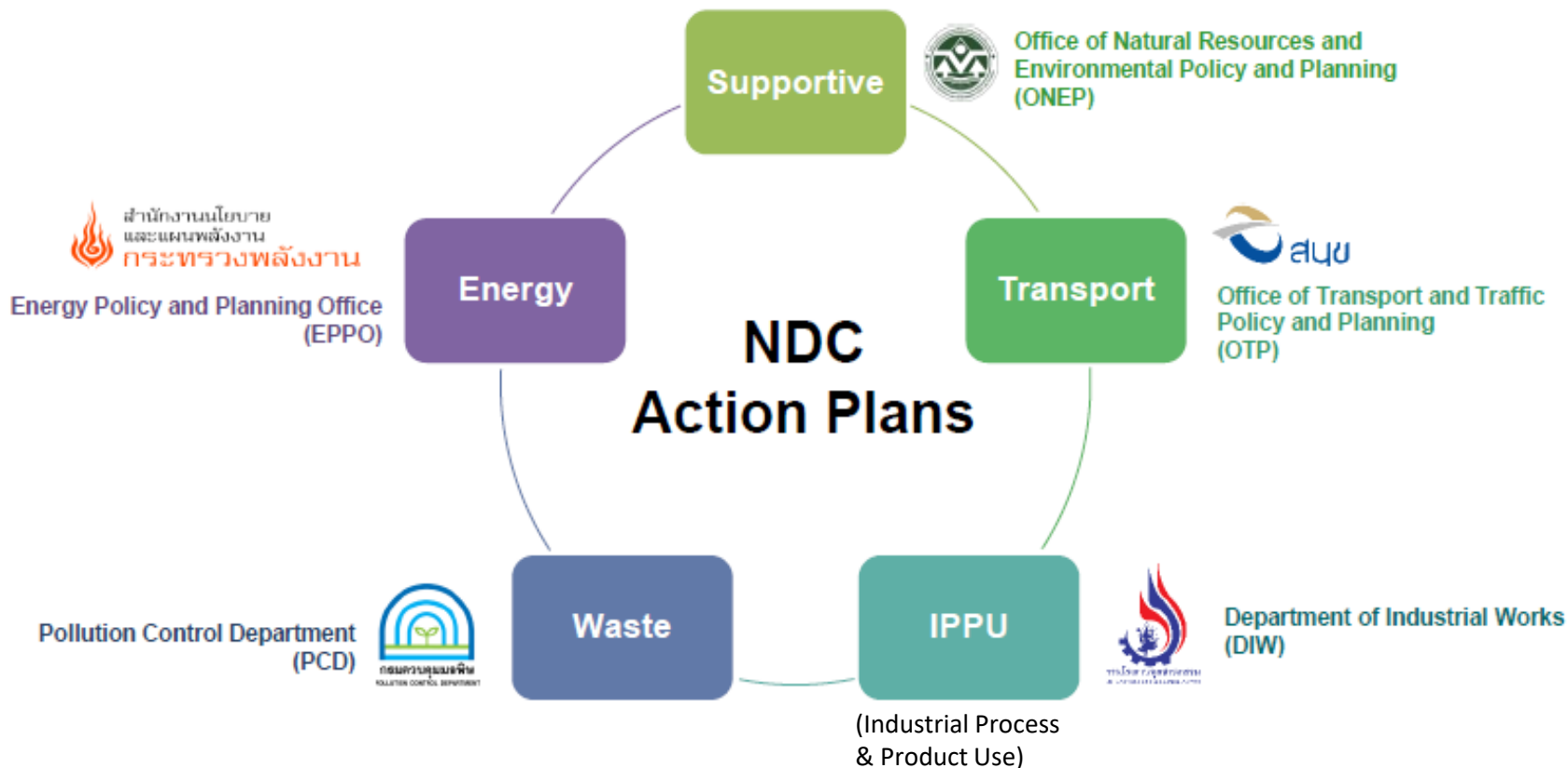
National Policies and Plans

- Climate change mitigation has been incorporated into National Development Plans.

“THAILAND INTENDS TO REDUCE GREENHOUSE GAS EMISSIONS BY 20% FROM BAU (business-as-usual) LEVEL BY 2030”



Thailand's Nationally Determined Contribution Roadmap on Mitigation





Challenges to Industry

- The industry will encounter more stringent regulations and measures against global warming.

Action Plan for Roadmap on Mitigation

Energy & Transport

- Increase power generation efficiency
- Energy efficiency in buildings/ households
- Energy efficiency in transport
- Renewable energy generation
- Promote biofuels
- etc.

Waste

- Waste reduction
- Municipal wastewater management
- Industrial wastewater management
- etc.

Industrial Process & Product Use



Development and improvement of laws or regulations to support GHG reduction

Development of economic mechanisms and incentives to support GHG reduction



CHALLENGES TO INDUSTRIES

- Development and certification of environmental products; environmental friendly labeling
- Stringent supervision and law enforcement; more supervision on imports of recycled materials, increase efficiency of waste disposal and waste treatment
- Economic mechanisms and social measures for pollution management system



- To stay competitive, Industry has to foresee the impacts from changes, be resilient and adaptive.
- Embracing circular economy concept into action across the industry's value chain will contribute to a long term growth and sustainable development.
- Cooperation will be key to making the circular economy a reality.



Thank You