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# Driving policies toward substantially enhance the safety of motorcycles in Thailand: Stories of ABS and AHO



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Anti-lock Braking System (ABS)  
recent achievement of Thailand  
2021

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# Stop the Crash in Bangkok

## 12 May 2017



**Stop the Crash** @StoptheCrash 9h  
Thx to @ChamnongNikorn for supporting our #stopthecrash launch today in Bangkok as part of @UNGRSW bit.ly/STCthailand

“This week the #4RoadSafety Manifesto was launched providing a template for legislators to bring road safety regulations to their countries. I hope that following Stop the Crash the Thai government will bring legislation on ESC and ABS in motorcycles, two technologies much needed in our country and that can help save lives.”

Hon Nikorn Chamnong MP



# Anti-lock Braking System (ABS)

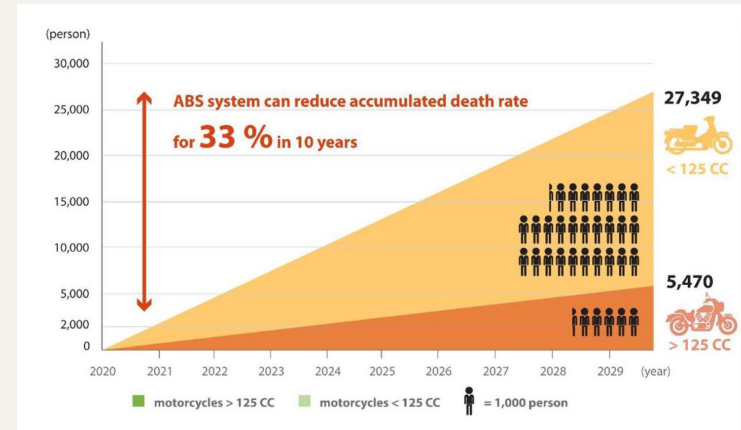
## Preposition

How effective is motorcycle ABS?

- Evidence in Germany, India and Indonesia shows that ABS helps preventing motorcycle accidents by 26, 33, and 26 percent respectively\*
- The rate of fatal crashes among motorcycles equipped with ABS is 37 % lower than those with non-ABS brakes\*\*
- Reduce economic losses 153,165-229,740 million baht (Sumet, TDR)

\* Kumaresh G et al. (2017).

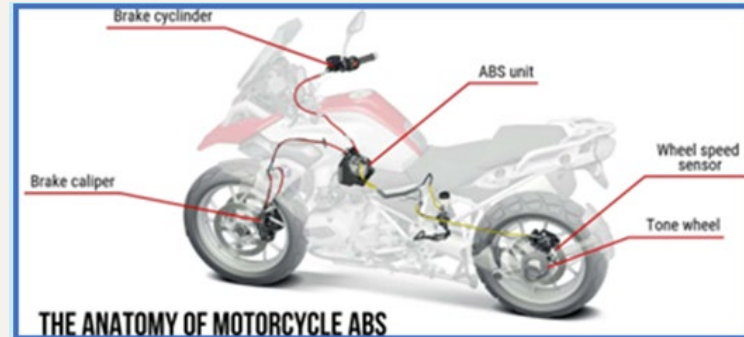
\*\* WHO (World Health Organization) (2017)



# Anti-lock Braking System (ABS)

## Against

- The cost of ABS installation is about 3,500-7,000 Baht (This adds roughly 10% to the price of the motorcycle) induced resistance from Industry and consumers



# Anti-lock Braking System (ABS)

## Timeline

- Under the Committee on Transport of the House of Representatives on road safety and transport, **the Sub-Committee (initiated and chaired by me) proposed the reports and observations on road safety and transport to the committee. Recommendation includes:**
  - **To Determine the installation of Anti - Lock Brake System (ABS) in motorcycles**
- “The Reports and observations of the Committee on Transport of the House of Representatives on road safety and transport” was submitted by National Assembly to the Cabinet on 31 July 2020.
- The Cabinet authorized the Ministry of Transport to move forward with the recommendations
- **In 2021, Department of Land Transport issued a Notification regarding Motorcycles’ Brake system. And from 1 January 2024, new models of motorcycles shall be equipped with ABS\***

\* May opt for CBS (Combined brake system) for motorcycle with displacement of 125cc or less

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Recalling  
Automatic Headlight On (AHO)  
achievement of Thailand  
back in 2004

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# Automatic Headlight On (AHO)

- A pilot project was launched at Songkhla Province (my hometown).
- Songkhla province is close to Malaysia, where it is also compulsory for rider of motorcycles to switch on the lights (Running Headlight On: RHO).
- After 2 months of pilot project, accident rate of Songkhla province was reduced by 25%.





# Automatic Headlight On (AHO)

- Success accident reduction in the pilot area eased persuasion for the further implementation
- **In 2004, Department of Land Transport issued a notification that made Automatic Headlight On (AHO) mandatory. Since 1 January 2005, only motorcycles with AHO can be registered.**



# Challenges & Opportunities for ABS implementation

## **Facts**

- Motorcycles involve 80% of road traffic accidents and deaths in Thailand.
- Motorcycles (22 millions) take into account half of total registered vehicles (43 millions).
- Motorcycles with displacement of 125cc or less take into account 80% of total number of Motorcycles.

## **Challenges & Opportunities**

- Small portion of motorcycle required to equip with only ABS, while the large portion required to equip with ABS or CBS as alternative.
- Equipping ABS could increase motorcycles' price by 10%. As most Thai people buy motorcycle on installment payment, small price rise can affect consumers significantly.
- Comparison of ABS vs CBS to be further discussed.
- It takes time until existing motorcycles without ABS/CBS to phaseout from the road.
- Riders' skills is an important factor as well. Motorcycle braking skills training needs improvement in parallel.

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**Key takeaway:**

## **Driving Road Safety Policy in Thailand**

- **Have clear policy**
  - **Use peer influence**
  - **Evidence-based Motivation**
  - **Prove that investment is worthwhile (for Individual and Country)**
  - **Leadership**
  - **Determine the key success factors**
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Thank you

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