Climate-friendly Transport development for Thailand
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Thailand
• Current situations

• NAMAs and NDC in Transportation

• People-centered Urban Mobility in Thailand
Bangkok Metropolitan Region, BMR

POPULATION: 17.5 millions
AREA: 7,760 sq.km.
GDP 68% of National GDP
Bangkok’s Land Use (Urban Sprawl)

การขยายตัวเมืองจากภาพถ่ายดาวเทียมปี 2531-2545

- Year 1988
- Year 2002

ขอบเขตพื้นที่ที่ขยาย
Quality of Life

The CO₂ PROBLEM IS A TRANSPORT PROBLEM, PREDOMINATELY CARS AROUND URBAN AREAS
Travel Pattern of people in Bangkok

Total 22 Mil. Trips/Day

Bus 36.4%
7.98 Mil. Trips/Day

Mass Transit 3.5%
BTS 0.64 Mil. Trips/Day

MRT 0.22 Mil. Trips/Day

Car 56.9%
12.5 Mil. Trips/Day
Thailand’s National Determined Contribution

Thailand Intends to Reduce Greenhouse Gas Emission By 20% From BAU Level By 2030

Energy production 24
Waste water 0.7
Energy Efficiency 8 Mt
Bio-fuel 18 Mt
Mode shift 23 Mt
IPPU 0.6
Transport 41
Energy Industries 43
Waste 1.3
Household 4
Commercial 1

115.6 MtCO₂

(ร้อยละของการลดก๊าซเรือนกระจก แต่ละภาคเป็นหลัก 20 ณ ปี พ.ศ.2030)
People-centered Urban Mobility in Thailand

Baseline

Existing means of passenger transport in urban areas
National Policy Framework promoting Bus and NMT as feeder modes

### Bus Public Transport Management
- Improved bus stations
- Dedicated bus lanes / BRT

### Non-Motorized Transport Accessibility
- Cycling (Parking, bike lanes, unblocking sois)
- Walking (PT stations, Street crossings, sidewalks, cover and shade)

### Infrastructure
- Bus route optimization and institutional reform
- Improved bus stations
- Dedicated bus lanes / BRT

### Regulation & Planning
- Bus priority measures
- Parking management and pricing
- Accessibility of footpaths (vendors, objects)
- Shared road concepts (speed limits, signage)

### Information & Communication
- Real time traffic information
- Branding and awareness
- Awareness Campaigns (benefits and branding of PT and NMT)
- ‘NMT-friendly Neighborhood’ (Branding, events)

### Strengthening of Data and Monitoring (MRV)
The design of bus routes and infrastructure for public transport connectivity

http://goo.gl/FUp87U

http://goo.gl/AArnnu
New BMTA’s buses which is compatible to environmentally friendly fuel

http://goo.gl/MDkdBR

Integrated ticket

http://goo.gl/cnnDYK
### Expected greenhouse gas emission reduction (rough calculation)

<table>
<thead>
<tr>
<th>Activities for greenhouse gas emission reduction</th>
<th>The estimated greenhouse gas emission reduction in 2030* (million ton CO₂)</th>
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<tbody>
<tr>
<td>1) Urban Public Transport Connectivity by Non-Motorised Transport (NMT)</td>
<td>0.05 – 0.3</td>
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<tr>
<td>2) Public transport management</td>
<td>0.1 – 0.7</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>0.1 – 1.0</strong></td>
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Improving public bus services and **Non-Motorised** transport in Bangkok

**Conclusion**

- This concept can be replicated to new construction public transit lines in the future
- Need the improvement in all aspects: Infrastructure, Regulation and planning and Information and communication
- Need cooperation from various stakeholders
- Need to raise public awareness to people

The number of station according to rail network master plan (after adjusted gray line)
- Interchange station : 52 stations
- non-interchange station : 222 stations
- Total station : 274 stations

Rail transit network master plan in Bangkok and vicinities