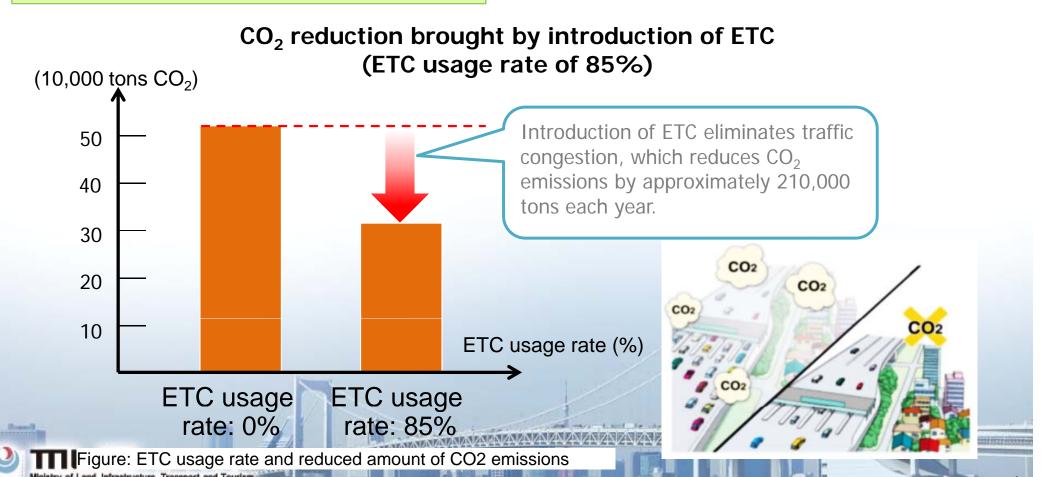
# **ETC (Electronic Toll Collection system)**

- eliminates almost all toll-gate congestion on expressways (30% of all expressway congestion).
- usage rate on toll roads: 87% (39 million automobiles).



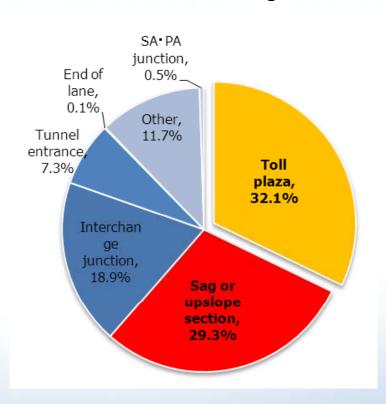
cuts CO2 emissions by about0.21million tons per year

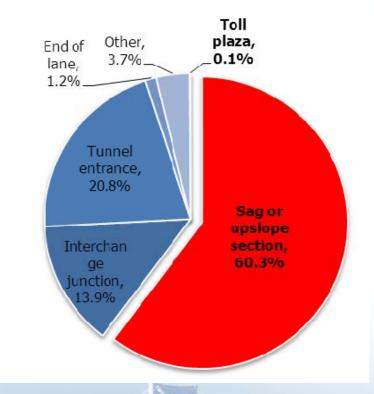


# **ETC (Electronic Toll Collection system)**

- 60% of congestion occurs at sags and on upslope section.
- Urgent measures urgently required.

#### Congestion on inter-city expressways





### 2000 without ETC

Total congestion frequency = 12,378 per year

### 2009 with ETC

Total congestion amount = 107,516 km·h per year

Source : H23 ETC Handbook Simplified version

Ministry of Land, Infrastructure, Transport and Tourism

Prepared based on totals for three NEXCO companies (congestion amount = number of congestion incidents x average congestion time x average maximum congestion length /2)