

11.4 Law Concerning Special Measures to Reduce The Total Mass of Nitrogen Oxides Discharged by Motor Vehicles in Specified Areas (The Motor Vehicle NO_x Law)

11.4.1 Background

To cope with the problem of air pollution from nitrogen oxides, the Air Pollution Control Law has been amended to intensify control over factories, business establishments and motor vehicle exhausts (single source control). Nevertheless, air pollution due to nitrogen oxides remains serious in metropolitan districts, and polluted areas have expanded. Load factors, as the source of nitrogen oxide from emission motor vehicles, have remained extremely high in recent years, and these stood at 71 percent in Tokyo and 53 percent in Osaka in 1990.

To reduce area-wide total load of nitrogen oxides discharged from motor vehicles in areas where it is expected to be difficult to attain the prescribed environmental quality standard for nitrogen dioxide solely with the reinforcement of single source control, the Law Concerning Special Measures to Reduce the Total Mass of Nitrogen Oxides Discharged by Motor Vehicles in Specified Areas was enacted in 1992.

11.4.2 Overview

A total of 196 cities, wards, towns and villages in Tokyo metropolitan, Saitama, Chiba, Kanagawa, Osaka and Hyogo Prefectures were designated under the Law as specified areas with significant air pollution due to nitrogen oxides exhausted from motor vehicles. The following measures are being carried out with a view to roughly achieving the prescribed environmental quality standard for nitrogen dioxide by the end of fiscal 2000 (Fig.11.4.1):

(1) Basic plan for total mass emissions reduction and the total mass emissions reduction program

The State prescribes the basic plan for total mass emissions reduction as the master plan under the Law. As specific measures to achieve total mass emission reduction in the basic plan, the State is required to tighten single source control over motor vehicles, implement control by vehicle categories, encourage the spread of pollution-free automobiles, promote measures to facilitate the flow of goods, people and traffic, promote localized pollution control, and promote activities to disseminate knowledge and raise awareness. Each prefecture on its part formulates a total mass emissions reduction program in accordance with the basic plan and enforces necessary measures.

(2) Emission Standards for specified motor vehicles

Emission standards are established for specified motor vehicles such as cargo trucks and buses that are operated within a specified area as the home service area. Vehicles that fail to meet the prescribed standards are subject to various measures such as non-issuance of official car inspection certificates.

(3) Guidelines for the rational use of motor vehicles

The competent minister overseeing business establishments draws up guidelines for facilitating the rational

use of motor vehicles and provides the enterprises with necessary directions and advice to help reduce the amounts of nitrogen oxide emissions.

(Promulgated on June 3, 1992. "Regulations by vehicle categories" enforced as of December 1, 1993)

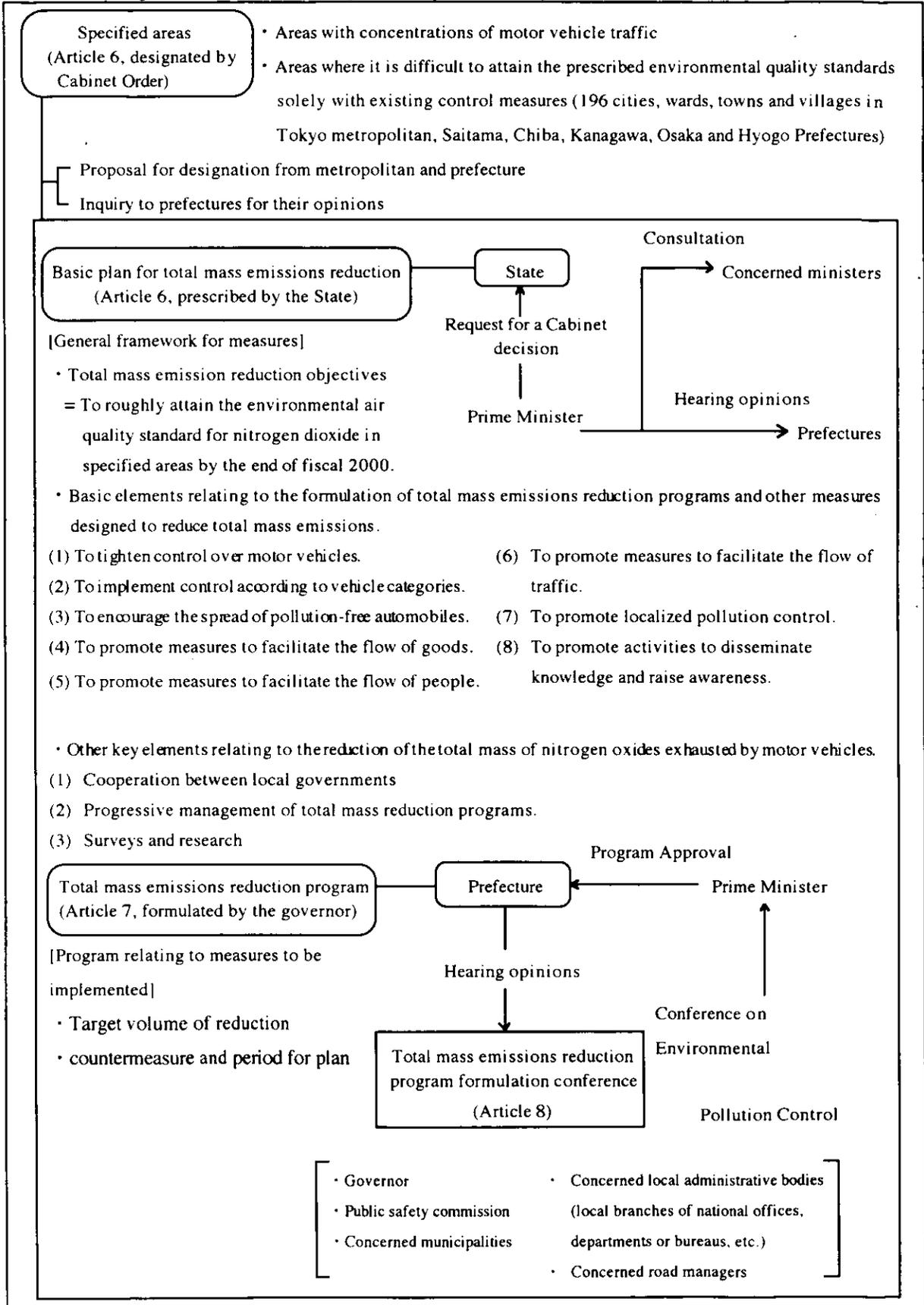


Fig.11.4.1 (1) Structure of the Motor Vehicle NOx Law

(Promulgated on June 3, 1992. "Regulations by vehicle categories" enforced as of December 1, 1993)

State assistance (Article 15)

Application of emission standards to specified motor vehicles (control according to vehicle categories) (Articles 10-12)

- Cargo trucks, buses and other special motor vehicles that are operated within a specified area as the home service area and which fail to meet the emission standards for specified motor vehicles (table below) will not be permitted to operate.

Vehicle classification by total weight	Emission standards for specified motor vehicles
1.7 t or less	Equivalent to gasoline or LPG-fueled vehicles under 1988 registration
Over 1.7t - 2.5t or less	Equivalent to gasoline or LPG-fueled vehicles under 1989 registration
Over 2.5t - 5.0t or less	Equivalent to accessory cell diesel-powered vehicles under 1989 regulation (*)
Over 5.0t	Equivalent to direct injection diesel-powered vehicles under 1989 regulation (*)

* Note: Vehicles produced in or after September 1995 are subject to standards equivalent to those under 1994 regulations.

Category	Number of years from initial registration	Classification number on number plate
Ordinary-sized cargo vehicle	9	1 and 10-19
Small-sized cargo vehicle	8	4 and 40-49, 6 and 60-69
Large bus (seating capacity of 30 or more persons)	12	2 and 20-29
Microbus (seating capacity of 11 or more but under 30 persons)	10	2 and 20-29 (5 and 50-59, and 7 and 70-79 for some)
Special vehicle (based on a cargo truck or bus)	10	8 and 80-89

* Control according to vehicle categories is secured by the Road Transport and Motor Vehicle Law (An official car inspection certificate will not be issued to a non-conforming vehicle).

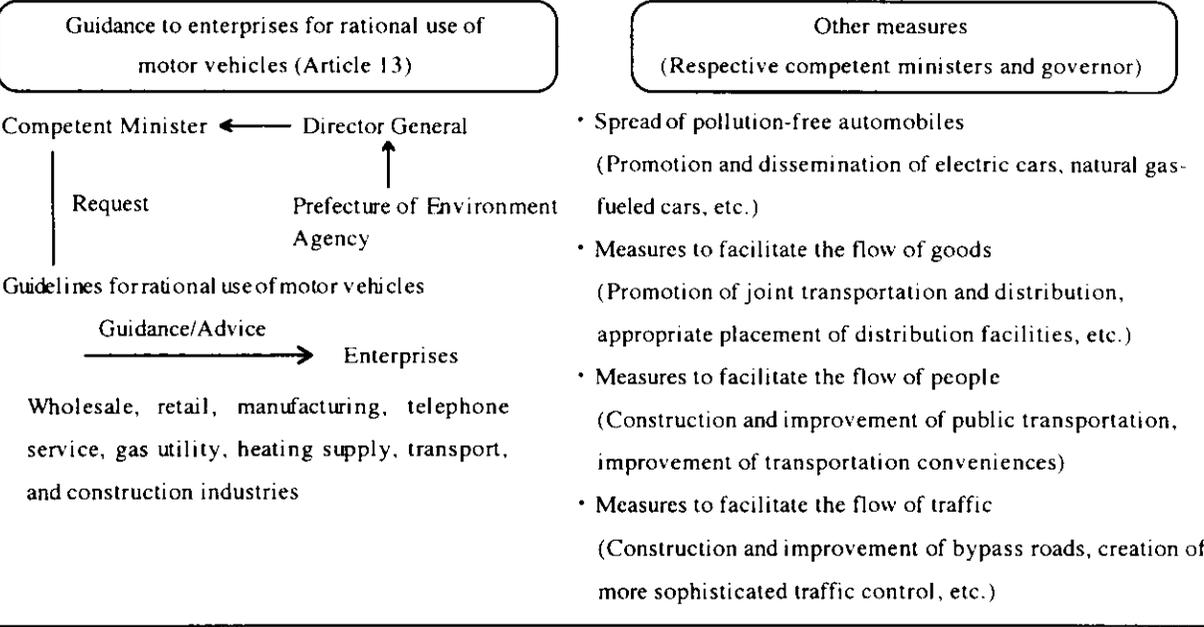


Fig. 11.4.1 (2) Structure of the Motor Vehicle NOx Law