



**CSA B401.1:21**  
National Standard of Canada



# Natural gas vehicle (NGV) maintenance facilities code



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# ***Revision History***

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*CSA B401.1:21*

***Natural gas vehicle (NGV)  
maintenance facilities code***

**IGAC**

*Interprovincial Gas Advisory Council*



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# Preface

This is the first edition of CSA B401.1, *Natural gas vehicle (NGV) maintenance facilities code*. It supersedes previous edition published in 2018 as CSA B401 under the title *Vehicle maintenance facilities code*.

The following are the major changes to this edition:

- a) addition of coverage to address maintenance facilities for propane vehicles. This led the creation of separate codes to address different fuel types: CSA B401.1 for natural gas and CSA B401.2 for propane;
- b) addition of Annex [D](#) for private enclosed parking structures;
- c) information in Annex D from the 2018 edition relocated to new Annex [E](#); and
- d) addition of Annex [E](#), a commentary, to provide additional guidance to users of this Code.

CSA Group acknowledges that the development of this Code was made possible, in part, by the financial support of Natural Resources Canada.

This Code was prepared by the Subcommittee on Vehicle Maintenance Facilities Code, under the jurisdiction of the Technical Committee on Natural Gas Transportation and the Strategic Steering Committee on Transportation, and has been formally approved by the Technical Committee and the Interprovincial/Territorial Gas Advisory Council.

This Code has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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  - d) *rationale for the change.*

# CSA B401.1:21

## Natural gas vehicle (NGV) maintenance facilities code

### 1 Scope

**Note:** See Annex [E](#) for explanatory material.

#### 1.1 Inclusions

##### 1.1.1 Vehicle maintenance

This Code applies to the portions of a motor vehicle maintenance facility where natural-gas-fuelled vehicles are maintained, repaired, or stored during maintenance or repair, including areas and systems ancillary thereto.

**Note:** See Annex [E](#) for explanatory material.

##### 1.1.2 Vehicle parking

This Code also contains information on private parking structures where natural gas fuelled vehicles are parked or stored, including areas and systems ancillary thereto. See Annex [D](#).

##### 1.1.3 Parking structure requirements

For purposes of this Code, private parking structures have the same requirements as minor repair areas.

#### 1.2 Exclusions

The scope of this Code does not include

- a) indoor or outdoor refuelling operations;
- b) open parking structures;
- c) public parking structures of any construction; or
- d) other fuels used for vehicles.

#### 1.3 Purpose

The purpose of this Code is to provide reasonable means to manage the risks associated with the maintenance and repair of vehicles fuelled with compressed natural gas (CNG) or liquefied natural gas (LNG) inside motor vehicle maintenance facilities.

**Note:** See Annex [E](#) for explanatory material.

#### 1.4 Terminology

The terms “fuelling” and “refuelling” are used interchangeably in this Code. The terms “park” and “store” and all derivatives thereof are used interchangeably in this Code.

#### 1.5 Units of record

The values given in SI units are the units of record for the purposes of this Code. The values given in parentheses are for information and comparison only.

**Notes:**

- 1) *IEEE/ASTM SI 10 or ISO 80000-1 can be used as a guide when converting Imperial units to metric units.*