



ICTSD Programme on Trade and Environment

HS Codes and the Transport Sector¹

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1. Abbreviations and acronyms

UN	United Nations
WCO	World Customs Organization ²
WTO	World Trade Organization

2. Harmonized System

2.1 Introduction

With a view to facilitating international trade, a commodity classification system was developed by the World Customs Organization (WCO). This system is laid down in the International Convention on the Harmonized Commodity Description and Coding System (done at Brussels, on 14 June 1983), also known as the “Harmonized System” or “HS”. As of 13 January 2010, 137 countries and economic or Customs unions are contracting party to this convention and another 70 countries and economic or Customs unions apply the system on a voluntary basis for Customs tariff and statistical

² In 1994, the Customs Co-operation Council adopted the working name “World Customs Organization” to reflect its transition to a global intergovernmental organisation. The Convention establishing the Customs Co-operation Council came into force in 1952. The organisation has 176 members (as per 13 January 2010).

purposes, thus covering over 98 percent of global trade.

Since the Harmonized System is updated on a more or less regular basis – sets of amendments came into force on 1 January 1992, 1996, 2002 and 2007, respectively – users may refer to different editions. Any reference in this paper to HS headings, subheadings and Section, Chapter or Subheading Notes, is based on the fourth edition (2007) of the Harmonized System.

2.2 Application

The Harmonized System is a multi-purpose tool, both in concept and design. Although developed as a Customs tariff and statistical tool, it is also used by governments, international organisations and the private sector for:

- internal taxes
- trade policies
- monitoring of controlled goods
- rules of origin
- freight tariffs
- transport statistics
- price monitoring
- quota controls
- compilation of national accounts
- economic research and analysis

The United Nations (UN) are using HS subheadings as building blocks for its economic classifications. Consequently, the data used for statistical systems such as the Standard International Trade Classification (SITC), the International Standard Industrial Classification of all economic activities (ISIC) and the Central Products Classification (CPC), is based on HS classification.

Also, the World Trade Organization (WTO) and its members use the Harmonized System as a common language for trade negotiations, and tariff concessions schedules of WTO members are based on the Harmonized System. In addition, the HS is also providing a basis for the Harmonization of non-preferential Rules of Origin, currently under development by the WTO.

Other international organisations use the HS as an instrument for monitoring international trade in certain controlled goods, e.g., chemical weapons material, hazardous waste, ozone-layer depleting substances and certain hazardous chemicals. The use of a single, global classification system in these areas has proved to be of great benefit to the implementation of and compliance with the international instruments involved.

Classification in the Harmonized System is also extensively used by individual countries in the application of preferential tariff treatment, in particular for the identification of the goods and for the determination of the origin of the goods.

2.3 Classification principles

The classification of goods in the Harmonized System follows its own rules. The appropriate HS

heading or subheading for each commodity has to be determined on the basis of a full description of the goods, in association with the texts of the headings (and subheadings), any relevant Section, Chapter or Subheading Notes, and the General Interpretative Rules. The General Interpretative Rules lay down guiding principles for classification purposes, with a view to arriving at a uniform interpretation and application of the system. For legal purposes, the wording of the headings and any relative Section, Chapter or Subheading Notes, are decisive. Titles of Section or Chapters are for reference only and do not have legal status.

The WCO has published Explanatory Notes to the Harmonized System, which clarify the scope of the headings and subheadings. However, they do not have legal status and cannot change the scope of a heading or subheading.

2.4 Structure

In the Harmonized System, commodities can be grouped together in a “heading”. Such headings are identified by a code consisting of four digits. The first two digits of this code indicate the Chapter wherein the heading appears, while the latter two indicate the position within that Chapter. The two groups of digits are separated by a period. For example, HS heading 84.19 belongs to Chapter 84 and is the 19th heading in that Chapter.

Most of the headings have been further subdivided into two or more one-dash subheadings which, where appropriate, have been further subdivided into two or more two-dash subheadings. Such subdivisions are identified by a unique six digits code, the so-called “HS code”. The first four digits of this HS code correspond to the heading number (but without the period between the first two digits and the last two), whereas the fifth and sixth digits identify the one-dash and two-dash subheadings, respectively. To identify the subheadings, the numbers one to nine are used. If there are no such subheadings, a zero is used. Also, if a heading has not been further subdivided, the last two digits are “00”. The last two digits are separated from the first four by a period.

3. Tables 1 and 2

3.1 Scope

Tables 1 and 2 refer to commodities and to technologies. The HS codes assigned would be applicable when the goods are presented (and, therefore, to be classified) separately. If components which constitute, for example, together a complete vehicle, are presented together, the resulting HS code(s) may be different, due to the classification rules.

3.2 Assignment of HS codes

HS codes have been assigned to each of the commodities to the extent possible.

3.3 Results

The components listed in Tables 1 and 2 are classified under 83 different HS codes, divided over 36 headings (see columns (3) and (2), respectively, of the table below). The table also shows the number of “hits” for each of the HS codes (column (4)).

With respect to the number of “hits” the following should, however, be taken into consideration.

It appears that the majority of the commodities fall within the HS chapters covering vehicles (Chapters 86 to 89), though also a fair part falls within the machinery section (Chapters 84 and 85).

Also, a particular HS code may cover a range of products, including the product referred to in one of the Tables. This results in a so-called “ex-out”, which is identified by using the prefix “ex” in front of the HS code. For example, HS code 8504.40 covers all types of static converters. In Table 1 reference is made to “superconducting magnetic energy storage”, which is a type of static converter. Since not all static converters are included in the Table reference, the prefix “ex” is used in front of HS code 8504.40.

4. Additional lists

4.1 WTO list and extracted list

In columns (5) and (6) of the table below, reference is made to the “WTO 153-list” and the “43-list”, respectively (hereinafter “the lists”). Where there is an overlap between the current document and any reference from the two lists, this is marked with “x” in the appropriate column.

4.2 WTO list

The “WTO 153-list” refers to the list of commodities specified in the Annex to WTO document JOB(07)/54 of 27 April 2007. This document concerns a non-paper by Canada, the European Communities, Japan, Korea, New Zealand, Norway, the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu, Switzerland and the United States of America, presented pursuant to the continued work under paragraph 31 (III) of the Doha Ministerial Declaration (reduction of Customs tariff rates for environmental goods). The Annex to this WTO document tables descriptions of commodities as a basis for negotiations within the context of environmental protection, including the following areas:

- air pollution control
- management of solid and hazardous waste and recycling systems
- clean up or remediation of soil and water
- renewable energy plant
- heat and energy management
- waste water management and potable water treatment
- environmentally preferable products, based on end use or disposal characteristics
- cleaner or more resource efficient technologies and products

- natural risk management
- natural resources protection
- noise and vibration abatement
- environmental monitoring, analysis and assessment equipment

4.3 Extracted list

The “43-list” concerns 43 products (derived from the WTO 153-list) that the World Bank identified as being relevant to climate mitigation and was proposed by the United States of America and the European Communities informally at the WTO December 2007. Therefore, an overlap between this document with this list is also an overlap with the WTO 153-list.

4.4 HS codes

It is to be noted that both lists are using HS codes from the HS 2002 edition, whereas this document uses HS codes from the 2007 edition. For the HS codes listed in this document there are no differences between the HS 2007 codes in column (3) and those referred to in both lists.

4.5 Scope of descriptions

Tables 1 and 2 refer to the consumer and intermediate products, while the lists also include complete installations and parts of components. This means that the overlap of HS codes covered in this document with those from the lists, is restricted. On the other hand, all environmental areas covered by the lists have been taken into account when comparing them with the HS codes in Tables 1 and 2.

From the table below it is clear that Members of WTO did apparently not consider the transport section as one falling within the scope of “environmental products”.

5. Table

(1)	HS heading (2)	HS 2007 Code (3)	Frequency (4)	WTO 153-list (5)	43-list (6)
1	22.07	2207.10	2		
2		2207.20	2		
3	27.10	Ex 2710.11	3		
4	27.11	2711.11			
5		2711.21			
6	29.05	2905.11			
7	38.24	Ex 3824.90	4		
8	73.11	Ex 7311.00	2		
9	76.13	Ex 7613.00	2		
10	84.07	Ex 8407.10			
11		Ex 8407.33	4		
12		Ex 8407.34	4		
13		Ex 8407.90	4		
14	84.08	Ex 8408.10			
15		Ex 8408.20			
16	84.09	Ex 8409.10			
17		Ex 8409.91	4	X	
18		Ex 8409.99		X	
19	84.11	Ex 8411.11			
20		Ex 8411.12			
21		Ex 8411.91			
22	84.14	Ex 8414.80		X	
23	84.15	Ex 8415.20			
24		Ex 8415.90			
25	85.01	Ex 8501.53			
26	85.04	Ex 8504.34			
27		Ex 8504.40		X	
28	85.06	Ex 8506.80	3	X	X
29		Ex 8506.90	3		
30	85.07	8507.20		X	X
31		8507.30			
32		8507.40			
33		Ex 8507.80	4		
34		8507.90			
35	85.41	Ex 8541.40		X	X
36	86.01	Ex 8601.10	9		
37		Ex 8601.20	6		
38	86.02	Ex 8602.10	7		
39		Ex 8602.90	3		
40	86.03	Ex 8603.10	7		
41		Ex 8603.90	6		
42	86.05	Ex 8605.00	5		
43	86.06	Ex 8606.10	2		
44		Ex 8606.30	2		
45		Ex 8606.91	2		
46		Ex 8606.92	2		
47		Ex 8606.99	2		
48	86.07	Ex 8607.11			
49		Ex 8607.19			

(1)	HS heading (2)	HS 2007 Code (3)	Frequency (4)	WTO 153-list (5)	43-list (6)
50		Ex 8607.91	7		
51		Ex 8607.99	5		
52	87.01	Ex 8701.20	11		
53	87.02	Ex 8702.10	5		
54		Ex 8702.90	12		
55	87.03	Ex 8703.21	8		
56		Ex 8703.22	8		
57		Ex 8703.23	8		
58		Ex 8703.24	8		
59		Ex 8703.31	5		
60		Ex 8703.32	5		
61		Ex 8703.33	5		
62		Ex 8703.90	11		
63	87.04	Ex 8704.21	5		
64		Ex 8704.22	5		
65		Ex 8704.23	5		
66		Ex 8704.31	8		
67		Ex 8704.32	8		
68		Ex 8704.90	7		
69	87.06	Ex 8706.00			
70	87.07	Ex 8707.10			
71		Ex 8707.90			
72	87.08	Ex 8708.10			
73		Ex 8708.29			
74		Ex 8708.40			
75	88.02	Ex 8802.40	3		
76	89.01	Ex 8901.10	8		
77		Ex 8901.20	4		
78		Ex 8901.30	4		
79		Ex 8901.90	8		
80	89.02	Ex 8902.00	8		
81	89.06	Ex 8906.10	4		
82	90.32	Ex 9032.89		X	
83		Ex 9032.90		X	

Annex with Tables 1 and 2 Listing Climate Mitigation Technologies/Goods in the Transport Sector with a Short Technical Description

Table 1: Climate Mitigation Goods Available on a Commercial Basis

ROAD TRANSPORT

Sector	Technology/Function	Technology sub-category and Goods (With Technical Description)	HS-Code/Ex-out	Observations
Road Transport	Reducing Vehicle Loads	<p><u>Lightweight Materials</u></p> <ul style="list-style-type: none"> • Vehicles switching to high strength steels: including relatively low strength grade (around 400 MPa) such as solution-hardened and precipitation-hardened HSS to very high strength grade (980–1400 MPa) such as TRIP steel and tempered martensitic HSS, which has the potential of weight reduction by 19% to 32% • Vehicles with replacing steel by lighter materials: including aluminium, magnesium and plastic, which has the potential of weight reduction by 19% to 21% • Vehicles with lighter design concepts and forming technologies 	<p>Road tractors for semi-trailers : Ex 8701.20</p> <p>For the transport of ten or more persons, including the driver :</p> <p>With diesel or semi-diesel engine: Ex 8702.10</p> <p>With other engine : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With spark-ignition engine: Not exceeding 1,000 cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p> <p>With diesel or semi-diesel engine: Not exceeding 1,500 cc : Ex 8703.31 Exceeding 1,500 cc but not exceeding 2,500 cc : Ex 8703.32 Exceeding 2,500 cc :</p>	<p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.10 – With compression-ignition internal combustion piston engine (diesel or semi-diesel) 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars. - Other vehicles, with spark-ignition internal combustion reciprocating piston engine : 8703.21 -- Of a cylinder</p>

			<p>Ex 8703.33</p> <p>With other engine (e.g., electric, Wankel) :</p> <p>Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With diesel or semi-diesel engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) :</p> <p>Ex 8704.21</p> <p>With diesel or semi-diesel engine and a g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes (other than dumpers designed for off-highway use) :</p> <p>Ex 8704.22</p> <p>With diesel or semi-diesel engine and a g.v.w. exceeding 20 tonnes (other than dumpers designed for off-highway use) :</p> <p>Ex 8704.23</p> <p>With spark-ignition engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) :</p> <p>Ex 8704.31</p> <p>With spark-ignition engine and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) :</p> <p>Ex 8704.32</p> <p>With other engine (e.g., electric) (other than</p>	<p>capacity not exceeding 1,000 cc</p> <p>8703.22 -- Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc</p> <p>8703.23 -- Of a cylinder capacity exceeding 1,500 cc but not exceeding 3,000 cc</p> <p>8703.24 -- Of a cylinder capacity exceeding 3,000 cc</p> <p>- Other vehicles, with compression-ignition internal combustion piston engine (diesel or semi-diesel) :</p> <p>8703.31 -- Of a cylinder capacity not exceeding 1,500 cc</p> <p>8703.32 -- Of a cylinder capacity exceeding 1,500 cc but not exceeding 2,500 cc</p> <p>8703.33 -- Of a cylinder capacity exceeding 2,500 cc</p> <p>8703.90 - Other</p>
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			<p>dumpers designed for off-highway use) : Ex 8704.90</p> <p>Chassis fitted with engines : Ex 8706.00</p> <p>Bodies :</p> <p>For the vehicles of heading 87.03 : Ex 8707.10</p> <p>For other vehicles : Ex 8707.90</p> <p>Other parts :</p> <p>Bumpers and parts thereof : Ex 8708.10</p> <p>Other parts and accessories of bodies : Ex 8708.29</p>	<p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with compression-ignition internal combustion piston engine (diesel or semi-diesel) : 8704.21 -- g.v.w. not exceeding 5 tonnes 8704.22 -- g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes 8704.23 -- g.v.w. exceeding 20 tonnes</p> <p>- Other, with spark-ignition internal combustion piston engine : 8704.31 -- g.v.w. not exceeding 5 tonnes 8704.32 -- g.v.w. exceeding 5 tonnes 8704.90 -Other</p> <p>Heading 87.06 : Chassis fitted with engines, for the motor vehicles of headings 87.01 to 87.05. 8706.00 Chassis fitted with engines, for the motor vehicles of headings 87.01 to 87.05</p> <p>Heading 87.07 : Bodies (including</p>
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				<p>cabs), for the motor vehicles of headings 87.01 to 87.05. 8707.10 - For the vehicles of heading 87.03 8707.90 - Other</p> <p>Heading 87.08 : Parts and accessories of the motor vehicles of headings 87.01 to 87.05. 8708.10 - Bumpers and parts thereof - Other parts and accessories of bodies (including cabs) : 8708.29 - - Other</p>
		<p><u>Aerodynamics Improvement</u></p> <ul style="list-style-type: none"> Vehicles with design improvement by using better testing technologies including wind tunnel, on track data, and even computational methods, such as Computational Fluid Dynamic (CFD) 	<p>Road tractors for semi-trailers : Ex 8701.20</p> <p>For the transport of ten or more persons, including the driver :</p> <p>With diesel or semi-diesel engine: Ex 8702.10</p> <p>With other engine : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With spark-ignition engine: Not exceeding 1,000 cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p>	<p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.10 – With compression-ignition internal combustion piston engine (diesel or semi-diesel) 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading</p>

			<p>With diesel or semi-diesel engine: Not exceeding 1,500 cc : Ex 8703.31 Exceeding 1,500 cc but not exceeding 2,500 cc : Ex 8703.32 Exceeding 2,500 cc : Ex 8703.33</p> <p>With other engine (e.g., electric, Wankel) : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With diesel or semi-diesel engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.21</p> <p>With diesel or semi-diesel engine and a g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes (other than dumpers designed for off-highway use) : Ex 8704.22</p> <p>With diesel or semi-diesel engine and a g.v.w. exceeding 20 tonnes (other than dumpers designed for off-highway use) : Ex 8704.23</p> <p>With spark-ignition engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p>	<p>87.02), including station wagons and racing cars.</p> <p>- Other vehicles, with spark-ignition internal combustion reciprocating piston engine : 8703.21 -- Of a cylinder capacity not exceeding 1,000 cc 8703.22 -- Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc 8703.23 -- Of a cylinder capacity exceeding 1,500 cc but not exceeding 3,000 cc 8703.24 -- Of a cylinder capacity exceeding 3,000 cc</p> <p>- Other vehicles, with compression-ignition internal combustion piston engine (diesel or semi-diesel) : 8703.31 -- Of a cylinder capacity not exceeding 1,500 cc 8703.32 -- Of a cylinder capacity exceeding 1,500</p>
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			<p>With spark-ignition engine and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p> <p>With other engine (e.g., electric) (other than dumpers designed for off-highway use) : Ex 8704.90</p> <p>Chassis fitted with engines :</p> <p>Ex 8706.00</p> <p>Bodies :</p> <p>For the vehicles of heading 87.03 : Ex 8707.10</p> <p>For other vehicles : Ex 8707.90</p> <p>Other parts :</p> <p>Bumpers and parts thereof : Ex 8708.10</p> <p>Other parts and accessories of bodies : Ex 8708.29</p>	<p>cc but not exceeding 2,500 cc</p> <p>8703.33 -- Of a cylinder capacity exceeding 2,500 cc</p> <p>8703.90 -Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with compression-ignition internal combustion piston engine (diesel or semi-diesel) :</p> <p>8704.21 -- g.v.w. not exceeding 5 tonnes</p> <p>8704.22 -- g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes</p> <p>8704.23 -- g.v.w. exceeding 20 tonnes</p> <p>- Other, with spark-ignition internal combustion piston engine :</p> <p>8704.31 -- g.v.w. not exceeding 5 tonnes</p> <p>8704.32 -- g.v.w. exceeding 5 tonnes</p> <p>8704.90 -Other</p> <p>Heading 87.06 : Chassis fitted with engines, for the motor vehicles of headings 87.01 to 87.05.</p>
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				<p>8706.00 Chassis fitted with engines, for the motor vehicles of headings 87.01 to 87.05</p> <p>Heading 87.07 : Bodies (including cabs), for the motor vehicles of headings 87.01 to 87.05.</p> <p>8707.10 -For the vehicles of heading 87.03</p> <p>8707.90 -Other</p> <p>Heading 87.08 : Parts and accessories of the motor vehicles of headings 87.01 to 87.05.</p> <p>8708.10 -Bumpers and parts thereof</p> <p>- Other parts and accessories of bodies (including cabs) :</p> <p>8708.29 -- Other</p>
		<ul style="list-style-type: none"> Mobile Air-Conditioning Systems using new refrigerants such as HFC-152a or CO₂ 	<p>Of a kind used for persons, in motor vehicles : Ex 8415.20</p> <p>Parts of MAC systems of a kind used for persons, in motor vehicles : Ex 8415.90</p> <p>Road tractors for semi-trailers : Ex 8701.20</p> <p>For the transport of ten or more persons, including the driver :</p> <p>With diesel or semi-diesel engine: Ex 8702.10</p> <p>With other engine :</p>	<p>Heading 84.15 : Air conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated.</p> <p>8415.20 -Of a kind used for persons, in motor vehicles</p> <p>8415.90 -Parts</p> <p>Heading 87.01 : Tractors (other than tractors of</p>

		<p>Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With spark-ignition engine: Not exceeding 1,000 cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p> <p>With diesel or semi-diesel engine: Not exceeding 1,500 cc : Ex 8703.31 Exceeding 1,500 cc but not exceeding 2,500 cc : Ex 8703.32 Exceeding 2,500 cc : Ex 8703.33</p> <p>With other engine (e.g., electric, Wankel) : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With diesel or semi-diesel engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.21</p> <p>With diesel or semi-diesel engine and a g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes (other than dumpers designed for off-</p>	<p>heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.10 – With compression-ignition internal combustion piston engine (diesel or semi-diesel) 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars.</p> <p>- Other vehicles, with spark-ignition internal combustion reciprocating piston engine : 8703.21 -- Of a cylinder capacity not exceeding 1,000 cc 8703.22 -- Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc 8703.23 -- Of a cylinder capacity</p>
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			<p>highway use) : Ex 8704.22</p> <p>With diesel or semi-diesel engine and a g.v.w. exceeding 20 tonnes (other than dumpers designed for off-highway use) : Ex 8704.23</p> <p>With spark-ignition engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p> <p>With spark-ignition engine and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p> <p>With other engine (e.g., electric) (other than dumpers designed for off-highway use) : Ex 8704.90</p>	<p>exceedin g 1,500 cc but not exceedin g 3,000 cc</p> <p>8703.24 -- Of a cylinder capacity exceedin g 3,000 cc</p> <p>- Other vehicles, with compression-ignit ion internal combustion piston engine (diesel or semi-diesel) :</p> <p>8703.31 -- Of a cylinder capacity not exceedin g 1,500 cc</p> <p>8703.32 -- Of a cylinder capacity exceedin g 1,500 cc but not exceedin g 2,500 cc</p> <p>8703.33 -- Of a cylinder capacity exceedin g 2,500 cc</p> <p>8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with compression- ignition internal combustion piston engine (diesel or semi-diesel) :</p> <p>8704.21 -- g.v.w. not exceedin g 5 tonnes</p> <p>8704.22 -- g.v.w.</p>
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				<p>exceeding 5 tonnes but not exceeding 20 tonnes</p> <p>8704.23 -- g.v.w. exceeding 20 tonnes</p> <p>- Other, with spark-ignition internal combustion piston engine :</p> <p>8704.31 -- g.v.w. not exceeding 5 tonnes</p> <p>8704.32 -- g.v.w. exceeding 5 tonnes</p> <p>8704.90 - Other</p>	
			<ul style="list-style-type: none"> Advanced MAC improving the design of MAC systems, including the control system and airflow management 	<p>Of a kind used for persons, in motor vehicles : Ex 8415.20</p> <p>Parts of MAC systems of a kind used for persons, in motor vehicles : Ex 8415.90</p> <p>Road tractors for semi-trailers : Ex 8701.20</p> <p>For the transport of ten or more persons, including the driver :</p> <p>With diesel or semi-diesel engine: Ex 8702.10</p> <p>With other engine : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With spark-ignition engine: Not exceeding 1,000 cc :</p>	<p>Heading 84.15 : Air conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated. 8415.20 -Of a kind used for persons, in motor vehicles 8415.90 -Parts</p> <p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the</p>

			<p>Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc :</p> <p>Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc :</p> <p>Ex 8703.23 Exceeding 3,000 cc :</p> <p>Ex 8703.24</p> <p>With diesel or semi- diesel engine: Not exceeding 1,500 cc :</p> <p>Ex 8703.31 Exceeding 1,500 cc but not exceeding 2,500 cc :</p> <p>Ex 8703.32 Exceeding 2,500 cc :</p> <p>Ex 8703.33</p> <p>With other engine (e.g., electric, Wankel) :</p> <p>Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With diesel or semi- diesel engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) :</p> <p>Ex 8704.21</p> <p>With diesel or semi- diesel engine and a g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes (other than dumpers designed for off- highway use) :</p> <p>Ex 8704.22</p> <p>With diesel or semi- diesel engine and a g.v.w. exceeding 20 tonnes (other than dumpers designed for off-highway use) :</p> <p>Ex 8704.23</p> <p>With spark-ignition engine and a g.v.w. not exceeding 5</p>	<p>driver. 8702.10 – With compression- ignition internal combustion piston engine (diesel or semi- diesel)</p> <p>8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars. - Other vehicles, with spark-ignition internal combustion reciprocating piston engine : 8703.21 - - Of a cylinder capacity not exceedin g 1,000 cc 8703.22 - - Of a cylinder capacity exceedin g 1,000 cc but not exceedin g 1,500 cc 8703.23 - - Of a cylinder capacity exceedin g 1,500 cc but not exceedin g 3,000 cc 8703.24 - - Of a cylinder capacity</p>
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			<p>tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p> <p>With spark-ignition engine and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p> <p>With other engine (e.g., electric) (other than dumpers designed for off-highway use) : Ex 8704.90</p>	<p>exceeding 3,000 cc</p> <p>- Other vehicles, with compression-ignition internal combustion piston engine (diesel or semi-diesel) :</p> <p>8703.31 - - Of a cylinder capacity not exceeding 1,500 cc</p> <p>8703.32 - - Of a cylinder capacity exceeding 1,500 cc but not exceeding 2,500 cc</p> <p>8703.33 - - Of a cylinder capacity exceeding 2,500 cc</p> <p>8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with compression-ignition internal combustion piston engine (diesel or semi-diesel) :</p> <p>8704.21 - - g.v.w. not exceeding 5 tonnes</p> <p>8704.22 - - g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes</p> <p>8704.23 - - g.v.w. exceeding 20</p>
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				<p>tonnes</p> <p>- Other, with spark-ignition internal combustion piston engine :</p> <p>8704.31 - - g.v.w. not exceeding 5 tonnes</p> <p>8704.32 - - g.v.w. exceeding 5 tonnes</p> <p>8704.90 - Other</p>
	<p><i>Improving Drive-Train efficiency</i></p>	<p><u>Internal combustion engines(ICE)</u></p> <ul style="list-style-type: none"> • downsized spark ignition engines. Static downsizing with redesigned engines can reduce engine displacement by up to 30% 	<p>Spark-ignition reciprocating internal combustion piston engines of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc : Ex 8407.33</p> <p>Spark-ignition reciprocating internal combustion piston engines of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 1,000 cc : Ex 8407.34</p> <p>Spark-ignition rotary internal combustion piston engines of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8407.90</p> <p>Parts suitable for use solely or principally with spark-ignition internal combustion piston engines, of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8409.91</p>	<p>Heading 84.07 : Spark-ignition reciprocating or rotary internal combustion piston engines.</p> <p>- Reciprocating piston engines of a kind used for the propulsion of vehicles of Chapter 87 : 8407.33 - - Of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc</p> <p>8407.34 - - Of a cylinder capacity exceeding 1,000 cc</p> <p>8407.90 - Other engines</p> <p>Heading 84.09 : Parts suitable for use solely or principally with the engines of heading 84.07 or 84.08.</p> <p>- Other : 8409.91 - - Suitable for use solely or principally with spark-ignition</p>

		<p><u>Advanced Direct Injection (DI) Gasoline / Diesel Engines and Transmissions.</u></p> <ul style="list-style-type: none"> • Direct injection diesel engines, yielding about 35% greater fuel economy than conventional gasoline engines • electronic control of the injection pump in DI is the key component. The injection timing, fuel quantity, EGR and turbo boost were all electronically controlled 	<p>Road tractors for semi-trailers : Ex 8701.20</p> <p>For the transport of ten or more persons, including the driver :</p> <p>With spark-ignition engine : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With spark-ignition engine: Not exceeding 1,000 cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p> <p>With other engine (e.g., electric, Wankel) : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With spark-ignition engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p> <p>With spark-ignition engine and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p> <p>With other engine (e.g., electric) (other than dumpers designed for off-</p>	<p>internal combustion piston engines</p> <p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars. - Other vehicles, with spark-ignition internal combustion reciprocating piston engine : 8703.21 - - Of a cylinder capacity not exceeding 1,000 cc 8703.22 - - Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc 8703.23 - - Of a cylinder capacity exceeding 1,500 cc but</p>
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			<p>highway use) : Ex 8704.90</p> <p>Diesel engines with direct injection, of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8408.20</p> <p>Parts suitable for use solely or principally with compression-ignition internal combustion piston engines Diesel engines with direct injection, of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8409.99</p> <p>Road tractors for semi-trailers with diesel engines with direct injection : Ex 8701.20</p> <p>Vehicles for the transport of ten or more persons, including the driver :</p> <p>With diesel or semi-diesel engine with direct injection : Ex 8702.10</p> <p>Other motor cars for the transport of persons :</p> <p>With diesel or semi-diesel engine with direct injection : Not exceeding 1,500 cc : Ex 8703.31 Exceeding 1,500 cc but not exceeding 2,500 cc : Ex 8703.32 Exceeding 2,500 cc : Ex 8703.33</p> <p>Vehicles for the transport of goods :</p> <p>With diesel or semi-</p>	<p>not exceeding 3,000 cc</p> <p>8703.24 - - Of a cylinder capacity exceeding 3,000 cc</p> <p>8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with spark-ignition internal combustion piston engine : 8704.31 - - g.v.w. not exceeding 5 tonnes</p> <p>8704.32 - - g.v.w. exceeding 5 tonnes</p> <p>8704.90 - Other</p> <p>Heading 84.08 Compression-ignition internal combustion piston engines (diesel or semi-diesel).</p> <p>8408.20 - Engines of a kind used for the propulsion of vehicles of Chapter 87</p> <p>Heading 84.09 : Parts suitable for use solely or principally with the engines of heading 84.07 or 84.08.</p> <p>- Other : 8409.99 - - Other</p> <p>Heading 87.01 : Tractors (other</p>
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			<p>diesel engine with direct injection and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.21</p> <p>With diesel or semi-diesel engine with direct injection and a g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes (other than dumpers designed for off-highway use) : Ex 8704.22</p> <p>With diesel or semi-diesel engine with direct injection and a g.v.w. exceeding 20 tonnes (other than dumpers designed for off-highway use) : Ex 8704.23</p> <p>Electronic controller for diesel injection pumps: Ex 9032.89</p> <p>Parts and accessories of electronic controllers for diesel injection pumps : Ex 9032.90</p>	<p>than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.10 – With compression-ignition internal combustion piston engine (diesel or semi-diesel)</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars. - Other vehicles, with compression-ignition internal combustion piston engine (diesel or semi-diesel) : 8703.31 -- Of a cylinder capacity not exceeding 1,500 cc 8703.32 -- Of a cylinder capacity exceeding 1,500 cc but not exceeding 2,500 cc 8703.33 -- Of a cylinder</p>
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				<p>capacity exceeding 2,500 cc</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with compression-ignition internal combustion piston engine (diesel or semi-diesel) :</p> <p>8704.21 - - g.v.w. not exceeding 5 tonnes</p> <p>8704.22 - - g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes</p> <p>8704.23 - - g.v.w. exceeding 20 tonnes</p> <p>Heading 90.32 : Automatic regulating or controlling instruments and apparatus.</p> <p>- Other instruments and apparatus :</p> <p>9032.89 - - Other</p> <p>9032.90 - Parts and accessories</p>
		<ul style="list-style-type: none"> • advanced 6 and 7 speed automatics transmission system • continuously variable transmissions (CVTs) 	<p>Road tractors for semi-trailers with advanced 6 and 7 speed automatics transmission system or with CVT : Ex 8701.20</p> <p>Vehicles for the transport of ten or more persons, including the driver, with advanced 6 and 7 speed automatics transmission system</p>	<p>Heading 87.01 : Tractors (other than tractors of heading 87.09).</p> <p>8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver.</p> <p>8702.10 – With compres</p>

			<p>or with CVT :</p> <p>With diesel or semi-diesel engine: Ex 8702.10</p> <p>With other engine : Ex 8702.90</p> <p>Other motor cars for the transport of persons, with advanced 6 and 7 speed automatics transmission system or with CVT :</p> <p>With spark-ignition engine: Not exceeding 1,000 cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p> <p>With diesel or semi-diesel engine: Not exceeding 1,500 cc : Ex 8703.31 Exceeding 1,500 cc but not exceeding 2,500 cc : Ex 8703.32 Exceeding 2,500 cc : Ex 8703.33</p> <p>With other engine (e.g., electric, Wankel) : Ex 8703.90</p> <p>Vehicles for the transport of goods, with advanced 6 and 7 speed automatics transmission system or with CVT :</p> <p>With diesel or semi-diesel engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use)</p>	<p>sion-ignition internal combustion piston engine (diesel or semi-diesel)</p> <p>8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars.</p> <p>- Other vehicles, with spark-ignition internal combustion reciprocating piston engine :</p> <p>8703.21 -- Of a cylinder capacity not exceeding 1,000 cc</p> <p>8703.22 -- Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc</p> <p>8703.23 -- Of a cylinder capacity exceeding 1,500 cc but not exceeding 3,000 cc</p> <p>8703.24 -- Of a cylinder capacity exceeding 3,000 cc</p>
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		<p>: Ex 8704.21</p> <p>With diesel or semi-diesel engine and a g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes (other than dumpers designed for off-highway use) : Ex 8704.22</p> <p>With diesel or semi-diesel engine and a g.v.w. exceeding 20 tonnes (other than dumpers designed for off-highway use) : Ex 8704.23</p> <p>With spark-ignition engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p> <p>With spark-ignition engine and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p> <p>With other engine (e.g., electric) (other than dumpers designed for off-highway use) : Ex 8704.90</p> <p>Automatic transmission systems and continuously variable transmissions and parts suitable for use solely or principally with such transmissions : Ex 8708.40</p>	<p>- Other vehicles, with compression-ignition internal combustion piston engine (diesel or semi-diesel) :</p> <p>8703.31 - - Of a cylinder capacity not exceeding 1,500 cc</p> <p>8703.32 - - Of a cylinder capacity exceeding 1,500 cc but not exceeding 2,500 cc</p> <p>8703.33 - - Of a cylinder capacity exceeding 2,500 cc</p> <p>8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with compression-ignition internal combustion piston engine (diesel or semi-diesel) :</p> <p>8704.21 - - g.v.w. not exceeding 5 tonnes</p> <p>8704.22 - - g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes</p> <p>8704.23 - - g.v.w. exceeding 20 tonnes</p> <p>- Other, with spark-ignition</p>
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				<p>internal combustion piston engine : 8704.31 - - g.v.w. not exceeding 5 tonnes 8704.32 - - g.v.w. exceeding 5 tonnes 8704.90 - Other</p> <p>Heading 87.08 : Parts and accessories of the motor vehicles of headings 87.01 to 87.05. 8708.40 – Gear boxes and parts thereof</p>
		<ul style="list-style-type: none"> • Hybrid-Drive Trains • Hybrid Cars • Mild Parallel hybrid: use a generally compact electric motor to give extra output during the acceleration, and to generate on the deceleration phase • Powersplit hybrid, there are two electric motors and one internal combustion engine • Series Hybrid, uses an electric motor(s), which is powered by a single-speed internal combustion engine • Plug-in hybrid electrical vehicle 	<p>Road tractors for semi-trailers with electric motor, whether or not combined with another engine : Ex 8701.20</p> <p>Vehicles for the transport of ten or more persons, including the driver, with electric motor, whether or not combined with another engine :</p> <p>With electric motor combined with diesel or semi-diesel engine : Ex 8702.10</p> <p>With electric motor combined with other engine or with an electric motor only : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With electric motor combined with spark-ignition engine : Not exceeding 1,000</p>	<p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.10 – With compression-ignition internal combustion piston engine (diesel or semi-diesel) 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and</p>

		<p>(PHEV), is a general fuel-electric (parallel or serial) hybrid with increased energy storage capacity (usually Li-ion batteries).</p>	<p>cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p> <p>With electric motor combined with diesel or semi-diesel engine : Not exceeding 1,500 cc : Ex 8703.31 Exceeding 1,500 cc but not exceeding 2,500 cc : Ex 8703.32 Exceeding 2,500 cc : Ex 8703.33</p> <p>With electric motor combined with other engine (e.g., Wankel) or having an electric motor only : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With electric motor combined with diesel or semi-diesel engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.21</p> <p>With electric motor combined with diesel or semi-diesel engine and a g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes (other than dumpers designed for off-highway use) : Ex 8704.22</p> <p>With electric motor combined with</p>	<p> racing cars.</p> <p>- Other vehicles, with spark-ignition internal combustion reciprocating piston engine : 8703.21 - - Of a cylinder capacity not exceeding 1,000 cc</p> <p>8703.22 - - Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc</p> <p>8703.23 - - Of a cylinder capacity exceeding 1,500 cc but not exceeding 3,000 cc</p> <p>8703.24 - - Of a cylinder capacity exceeding 3,000 cc</p> <p>- Other vehicles, with compression-ignition internal combustion piston engine (diesel or semi-diesel) : 8703.31 - - Of a cylinder capacity not exceeding 1,500 cc</p> <p>8703.32 - - Of a cylinder capacity exceeding 1,500 cc but not</p>
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			<p>diesel or semi-diesel engine and a g.v.w. exceeding 20 tonnes (other than dumpers designed for off-highway use) : Ex 8704.23</p> <p>With electric motor combined with spark-ignition engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p> <p>With electric motor combined with spark-ignition engine and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p> <p>With electric motor combined with other engine (e.g., electric) (other than dumpers designed for off-highway use) : Ex 8704.90</p>	<p>exceeding 2,500 cc</p> <p>8703.33 - - Of a cylinder capacity exceeding 2,500 cc</p> <p>8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with compression-ignition internal combustion piston engine (diesel or semi-diesel) :</p> <p>8704.21 - - g.v.w. not exceeding 5 tonnes</p> <p>8704.22 - - g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes</p> <p>8704.23 - - g.v.w. exceeding 20 tonnes</p> <p>- Other, with spark-ignition internal combustion piston engine :</p> <p>8704.31 - - g.v.w. not exceeding 5 tonnes</p> <p>8704.32 - - g.v.w. exceeding 5 tonnes</p> <p>8704.90 - Other</p>
	<i>Alternative Fuels</i>	<u>Biofuels</u>		
		<ul style="list-style-type: none"> Flexible fuel engine: the engine could use fuel with ethanol mixed with gasoline 	Spark-ignition reciprocating internal combustion piston engines which can use a mixture of ethanol and gasoline,	Heading 84.07 : Spark-ignition reciprocating or rotary internal combustion piston engines.

		<p>from range 0% to 100%.</p>	<p>of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc : Ex 8407.33</p> <p>Spark-ignition reciprocating internal combustion piston engines which can use a mixture of ethanol and gasoline, of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 1,000 cc : Ex 8407.34</p> <p>Spark-ignition rotary internal combustion piston engines which can use a mixture of ethanol and gasoline, of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8407.90</p> <p>Parts suitable for use solely or principally with spark-ignition internal combustion piston engines which can use a mixture of ethanol and gasoline, of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8409.91</p> <p>Road tractors for semi-trailers with spark-ignition internal combustion piston engines which can use a mixture of ethanol and gasoline : Ex 8701.20</p> <p>Vehicles for the transport of ten or more persons, including the driver :</p>	<p>- Reciprocating piston engines of a kind used for the propulsion of vehicles of Chapter 87 : 8407.33 - - Of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc 8407.34 - - Of a cylinder capacity exceeding 1,000 cc 8407.90 - Other engines</p> <p>Heading 84.09 : Parts suitable for use solely or principally with the engines of heading 84.07 or 84.08. - Other : 8409.91 - - Suitable for use solely or principally with spark-ignition internal combustion piston engines</p> <p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor</p>
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			<p>With spark-ignition engine which can use a mixture of ethanol and gasoline : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With spark-ignition engine which can use a mixture of ethanol and gasoline : Not exceeding 1,000 cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p> <p>With other engine (e.g., Wankel) which can use a mixture of ethanol and gasoline : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With spark-ignition engine which can use a mixture of ethanol and gasoline and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p> <p>With spark-ignition engine which can use a mixture of ethanol and gasoline and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p>	<p>vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars.</p> <p>- Other vehicles, with spark-ignition internal combustion reciprocating piston engine : 8703.21 - - Of a cylinder capacity not exceeding 1,000 cc 8703.22 - - Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc 8703.23 - - Of a cylinder capacity exceeding 1,500 cc but not exceeding 3,000 cc 8703.24 - - Of a cylinder capacity exceeding 3,000 cc 8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with spark-ignition internal combustion piston engine : 8704.31 - - g.v.w. not exceeding 5</p>
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				8704.32 -- g.v.w. exceeding 5 tonnes
		<u>Natural Gas</u>		
		<ul style="list-style-type: none"> Natural gas engine: 	<p>Spark-ignition reciprocating internal combustion piston engines using natural gas, of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc : Ex 8407.33</p> <p>Spark-ignition reciprocating internal combustion piston engines using natural gas, of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 1,000 cc : Ex 8407.34</p> <p>Spark-ignition rotary internal combustion piston engines using natural gas, of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8407.90</p> <p>Parts suitable for use solely or principally with spark-ignition internal combustion piston engines using natural gas, of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8409.91</p> <p>Road tractors for semi-trailers having engines using natural gas : Ex 8701.20</p>	<p>Heading 84.07 : Spark-ignition reciprocating or rotary internal combustion piston engines.</p> <p>- Reciprocating piston engines of a kind used for the propulsion of vehicles of Chapter 87 : 8407.33 -- Of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc</p> <p>8407.34 -- Of a cylinder capacity exceeding 1,000 cc</p> <p>8407.90 - Other engines</p> <p>Heading 84.09 : Parts suitable for use solely or principally with the engines of heading 84.07 or 84.08.</p> <p>- Other : 8409.91 -- Suitable for use solely or principally with spark-ignition internal combustion piston engines</p> <p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road</p>

			<p>Vehicles for the transport of ten or more persons, including the driver :</p> <p>With spark-ignition engine using natural gas : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With spark-ignition engine using natural gas : Not exceeding 1,000 cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p> <p>With other engine (e.g., Wankel) using natural gas : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With spark-ignition engine using natural gas and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p> <p>With spark-ignition engine using natural gas and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p>	<p>tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars.</p> <p>- Other vehicles, with spark-ignition internal combustion reciprocating piston engine : 8703.21 - - Of a cylinder capacity not exceeding 1,000 cc 8703.22 - - Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc 8703.23 - - Of a cylinder capacity exceeding 1,500 cc but not exceeding 3,000 cc 8703.24 - - Of a cylinder capacity exceeding 3,000 cc 8703.90 - Other</p>
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				<p>Heading 87.04 : Motor vehicles for the transport of goods. - Other, with spark-ignition internal combustion piston engine : 8704.31 - - g.v.w. not exceeding 5 tonnes 8704.32 - - g.v.w. exceeding 5 tonnes</p>
		<p><u>Hydrogen/Fuel Cells</u> • hydrogen internal combustion engines, burn fuel in the same manner that gasoline engines do.</p>	<p>Spark-ignition reciprocating hydrogen internal combustion piston engines of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc : Ex 8407.33</p> <p>Spark-ignition reciprocating hydrogen internal combustion piston engines of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 1,000 cc : Ex 8407.34</p> <p>Spark-ignition rotary hydrogen internal combustion piston engines of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8407.90</p> <p>Parts suitable for use solely or principally with spark-ignition hydrogen internal combustion piston</p>	<p>Heading 84.07 : Spark-ignition reciprocating or rotary internal combustion piston engines. - Reciprocating piston engines of a kind used for the propulsion of vehicles of Chapter 87 : 8407.33 - - Of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc 8407.34 - - Of a cylinder capacity exceeding 1,000 cc 8407.90 - Other engines</p> <p>Heading 84.09 : Parts suitable for use solely or principally with the engines of heading 84.07 or 84.08. - Other : 8409.91 - - Suitable for use solely or principally with</p>

		<ul style="list-style-type: none"> Fuel cells, create electricity to power an electric motor using hydrogen fuel and oxygen from the air 	<p>engines, of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8409.91</p> <p>Road tractors for semi-trailers with hydrogen internal combustion piston engines : Ex 8701.20</p> <p>Vehicles for the transport of ten or more persons, including the driver, with hydrogen internal combustion piston engines :</p> <p>With spark-ignition engine : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With spark-ignition hydrogen engine: Not exceeding 1,000 cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p> <p>With other engine (e.g., Wankel) : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With spark-ignition hydrogen engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p>	<p>spark-ignition internal combustion piston engines</p> <p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars. - Other vehicles, with spark-ignition internal combustion reciprocating piston engine : 8703.21 - - Of a cylinder capacity not exceeding 1,000 cc 8703.22 - - Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc 8703.23 - - Of a cylinder capacity exceedin</p>
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			<p>With spark-ignition hydrogen engine and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p> <p>Primary fuel cell : Ex 8506.80</p> <p>Parts of primary fuel cells : Ex 8506.90</p> <p>Road tractors for semi-trailers :</p> <p>With electric engine : Ex 8701.20</p> <p>Vehicles for the transport of ten or more persons, including the driver :</p> <p>With electric engine : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With electric engine : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With electric engine (other than dumpers designed for off-highway use) : Ex 8704.90</p>	<p>g 1,500 cc but not exceeding 3,000 cc</p> <p>8703.24 - - Of a cylinder capacity exceeding 3,000 cc</p> <p>8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with spark-ignition internal combustion piston engine : 8704.31 - - g.v.w. not exceeding 5 tonnes</p> <p>8704.32 - - g.v.w. exceeding 5 tonnes</p> <p>Heading 85.06 : Primary cells and primary batteries. 8506.80 - Other 8506.90 - Parts</p> <p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of</p>
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			<p>persons (other than those of heading 87.02), including station wagons and racing cars. 8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods. 8704.90 - Other</p>
		<ul style="list-style-type: none"> Hydrogen storage by cryogenic tank Hydrogen storage by compressed hydrogen storage tank 	<p>Hydrogen storage tank of iron or steel : Ex 7311.00</p> <p>Hydrogen storage tank of aluminium : Ex 7613.00</p> <p>Heading 73.11 : Containers for compressed or liquefied gas, of iron or steel. 7311.00 Containers for compressed or liquefied gas, of iron or steel</p> <p>Heading 76.13 : Aluminium containers for compressed or liquefied gas. 7613.00 Aluminium containers for compressed or liquefied gas</p>
		<ul style="list-style-type: none"> Electric Vehicles 	<p>Road tractors for semi-trailers : With electric engine : Ex 8701.20</p> <p>Vehicles for the transport of ten or more persons, including the driver : With electric engine : Ex 8702.90</p> <p>Other motor cars for the transport of persons : With electric engine : Ex 8703.90</p> <p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of</p>

		<ul style="list-style-type: none"> • Nickel metal hydride (NiMH) batteries • lithium-ion iron phosphate battery, uses LiFePO4 as a cathode material • by wire control system, is electronic control systems using electromechanical actuators and human-machine interfaces such as pedal and steering feel emulators 	<p>Vehicles for the transport of goods : With electric engine (other than dumpers designed for off-highway use) : Ex 8704.90</p> <p>Nickel metal hydride accumulators : Ex 8507.80</p> <p>Lithium-ion accumulators : Ex 8507.80</p> <p>???</p>	<p>persons (other than those of heading 87.02), including station wagons and racing cars. 8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods. 8704.90 - Other</p> <p>Heading 85.07 : Electric accumulators, including separators therefore, whether or not rectangular (including square). 8507.80 - Other accumulators</p>
		<ul style="list-style-type: none"> • Lithium-Ion Batteries 	<p>Lithium-ion accumulators : Ex 8507.80</p>	<p>Heading 85.07 : Electric accumulators, including separators therefore, whether or not rectangular (including square). 8507.80 – Other accumulators</p>

RAIL TRANSPORT

Sector	Technology/F unction	Technology sub- category and Goods (With Technical Description)	HS-Code/Ex-out	Observations
Rail Trans port	<i>Reducing Aerodynamic Resistance</i>	<ul style="list-style-type: none"> Locomotives with shielding with an exterior cover, is proven to cut the train's air drag by about 10% 	<p>Locomotives with shielding, powered from an external source of electricity : Ex 8601.10</p> <p>Locomotives with shielding, powered by electric accumulators : Ex 8601.20</p> <p>Locomotives with shielding, powered by a diesel-electric engine : Ex 8602.10</p> <p>Non-electric locomotives with shielding, powered by a diesel engine, other than diesel-electric : Ex 8602.90</p> <p>Parts suitable for use solely or principally with locomotives with shielding : Ex 8607.91</p>	<p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity 8601.20 - Powered by electric accumulators</p> <p>Heading 86.02 : Other rail locomotives; locomotive tenders. 8602.10 - Diesel-electric locomotives 8602.90 - Other</p> <p>Heading 86.07 : Parts of railway or tramway locomotives or rolling-stock. - Other : 8607.91 -- Of locomotives</p> <p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity</p> <p>Heading 86.07 : Parts of railway or tramway locomotives or rolling-stock. - Other : 8607.91 -- Of locomotives</p>
		<ul style="list-style-type: none"> Locomotives with aerodynamic optimization of pantographs Lubrication of wheels and tracks 	<p>Locomotives with aerodynamic optimization of pantographs, powered from an external source of electricity : Ex 8601.10</p> <p>Parts suitable for use solely or principally with locomotives with aerodynamic optimization of pantographs : Ex 8607.91</p> <p>???</p>	<p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity 8601.20 - Powered by electric accumulators</p>
		<ul style="list-style-type: none"> Streamlining of head and tail 	<p>Locomotives with streamlined head and tail, powered from an external source of electricity : Ex 8601.10</p> <p>Locomotives with streamlined head and tail, powered by electric accumulators :</p>	<p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity 8601.20 - Powered by electric accumulators</p>

			<p>Ex 8601.20</p> <p>Locomotives with streamlined head and tail, powered by a diesel-electric engine : Ex 8602.10</p> <p>Non-electric locomotives with streamlined head and tail, powered by a diesel engine, other than diesel-electric : Ex 8602.90</p> <p>Self-propelled railway coaches with streamlined head and tail, powered from an external source of electricity : Ex 8603.10</p> <p>Self-propelled railway coaches with streamlined head and tail, not powered from an external source of electricity : Ex 8603.90</p> <p>Not self-propelled railway passenger coaches with streamlined head and tail : Ex 8605.00</p> <p>Parts suitable for use solely or principally with locomotives with streamlined head and tail : Ex 8607.91</p> <p>Parts suitable for use solely or principally with railway passenger coaches (whether or not self-propelled) with streamlined head and tail : Ex 8607.99</p>	<p>Heading 86.02 : Other rail locomotives; locomotive tenders. 8602.10 - Diesel-electric locomotives 8602.90 - Other</p> <p>Heading 86.03 : Self-propelled railway or tramway coaches, vans and trucks, other than those of heading 86.04. 8603.10 - Powered from an external source of electricity 8603.90 - Other</p> <p>Heading 86.05 : Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04). 8605.00 Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04)</p> <p>Heading 86.07 : Parts of railway or tramway locomotives or rolling-stock. - Other : 8607.91 -- Of locomotives 8607.99 -- Other</p>
	<ul style="list-style-type: none"> Streamlining of train sides and underfloor areas 		<p>Locomotives with streamlined sides and underfloor areas, powered from an external source of electricity : Ex 8601.10</p> <p>Locomotives with streamlined sides and underfloor areas, powered by electric accumulators : Ex 8601.20</p> <p>Locomotives with streamlined sides and underfloor areas, powered</p>	<p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity 8601.20 - Powered by electric accumulators</p> <p>Heading 86.02 : Other rail locomotives; locomotive tenders. 8602.10 - Diesel-electric locomotives</p>

			<p>by a diesel-electric engine : Ex 8602.10</p> <p>Non-electric locomotives with streamlined sides and underfloor areas, powered by a diesel engine, other than diesel-electric : Ex 8602.90</p> <p>Self-propelled railway coaches with streamlined sides and underfloor areas, powered from an external source of electricity : Ex 8603.10</p> <p>Self-propelled railway coaches with streamlined sides and underfloor areas, not powered from an external source of electricity : Ex 8603.90</p> <p>Not self-propelled railway passenger coaches with streamlined sides and underfloor areas : Ex 8605.00</p> <p>Tank wagons with streamlined sides and underfloor areas : Ex 8606.10</p> <p>Self-discharging vans and wagons with streamlined sides and underfloor areas : Ex 8606.30</p> <p>Covered and closed vans and wagons with streamlined sides and underfloor areas : Ex 8606.91</p> <p>Open vans and wagons, with non-removable sides of a height exceeding 60 cm, with streamlined sides and underfloor areas : Ex 8606.92</p> <p>Other railway goods vans and wagons with streamlined sides and underfloor areas : Ex 8606.99</p> <p>Parts suitable for use solely or principally with locomotives with</p>	<p>8602.90 - Other</p> <p>Heading 86.03 : Self-propelled railway or tramway coaches, vans and trucks, other than those of heading 86.04. 8603.10 - Powered from an external source of electricity 8603.90 - Other</p> <p>Heading 86.05 : Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04). 8605.00 Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04)</p> <p>Heading 86.06 : Railway or tramway goods vans and wagons, not self-propelled. 8606.10 - Tank wagons and the like 8606.30 - Self-discharging vans and wagons, other than those of subheading 8606.10 - Other : 8606.91 -- Covered and closed 8606.92 -- Open, with non-removable sides of a height exceeding 60 cm 8606.99 -- Other</p> <p>Heading 86.07 : Parts of railway or tramway locomotives or rolling-stock. - Other : 8607.91 -- Of locomotives 8607.99 -- Other</p>
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		streamlined sides and underfloor areas : Ex 8607.91	
		Parts suitable for use solely or principally with railway passenger coaches (whether or not self-propelled) or with goods vans and wagons, with streamlined sides and underfloor areas : Ex 8607.99	
<i>Reducing Train Weight</i>	<ul style="list-style-type: none"> Trains with component-based lightweight design 	<p>Locomotives with component-based lightweight design, powered from an external source of electricity : Ex 8601.10</p> <p>Locomotives with component-based lightweight design, powered by electric accumulators : Ex 8601.20</p> <p>Locomotives with component-based lightweight design, powered by a diesel-electric engine : Ex 8602.10</p> <p>Non-electric locomotives with component-based lightweight design, powered by a diesel engine, other than diesel-electric : Ex 8602.90</p> <p>Self-propelled railway coaches with component-based lightweight design, powered from an external source of electricity : Ex 8603.10</p> <p>Self-propelled railway coaches with component-based lightweight design, not powered from an external source of electricity : Ex 8603.90</p> <p>Not self-propelled railway passenger coaches with component-based lightweight design : Ex 8605.00</p> <p>Tank wagons with component-based lightweight design :</p>	<p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity 8601.20 - Powered by electric accumulators</p> <p>Heading 86.02 : Other rail locomotives; locomotive tenders. 8602.10 - Diesel-electric locomotives 8602.90 - Other</p> <p>Heading 86.03 : Self-propelled railway or tramway coaches, vans and trucks, other than those of heading 86.04. 8603.10 - Powered from an external source of electricity 8603.90 - Other</p> <p>Heading 86.05 : Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04). 8605.00 Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04)</p> <p>Heading 86.06 :</p>

			<p>Ex 8606.10</p> <p>Self-discharging vans and wagons with component-based lightweight design : Ex 8606.30</p> <p>Covered and closed vans and wagons with component-based lightweight design : Ex 8606.91</p> <p>Open vans and wagons, with non-removable sides of a height exceeding 60 cm, with component-based lightweight design : Ex 8606.92</p> <p>Other railway goods vans and wagons with component-based lightweight design : Ex 8606.99</p> <p>Parts suitable for use solely or principally with locomotives with component-based lightweight design : Ex 8607.91</p> <p>Parts suitable for use solely or principally with railway passenger coaches (whether or not self-propelled) or with goods vans and wagons, with component-based lightweight design : Ex 8607.99</p>	<p>Railway or tramway goods vans and wagons, not self-propelled. 8606.10 - Tank wagons and the like 8606.30 - Self-discharging vans and wagons, other than those of subheading 8606.10 - Other : 8606.91 -- Covered and closed 8606.92 -- Open, with non-removable sides of a height exceeding 60 cm 8606.99 -- Other</p> <p>Heading 86.07 : Parts of railway or tramway locomotives or rolling-stock. - Other : 8607.91 -- Of locomotives 8607.99 -- Other</p>
		<ul style="list-style-type: none"> • System-based lightweight design 	<p>Locomotives with system-based lightweight design, powered from an external source of electricity : Ex 8601.10</p> <p>Locomotives with system-based lightweight design, powered by electric accumulators : Ex 8601.20</p> <p>Locomotives with system-based lightweight design, powered by a diesel-electric engine : Ex 8602.10</p> <p>Non-electric locomotives with system-based lightweight design, powered</p>	<p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity 8601.20 - Powered by electric accumulators</p> <p>Heading 86.02 : Other rail locomotives; locomotive tenders. 8602.10 - Diesel-electric locomotives 8602.90 - Other</p> <p>Heading 86.03 : Self-propelled railway or tramway coaches, vans and</p>

			<p>by a diesel engine, other than diesel-electric : Ex 8602.90</p> <p>Self-propelled railway coaches with system-based lightweight design, powered from an external source of electricity : Ex 8603.10</p> <p>Self-propelled railway coaches with system-based lightweight design, not powered from an external source of electricity : Ex 8603.90</p> <p>Not self-propelled railway passenger coaches with system-based lightweight design : Ex 8605.00</p> <p>Tank wagons with system-based lightweight design : Ex 8606.10</p> <p>Self-discharging vans and wagons with system-based lightweight design : Ex 8606.30</p> <p>Covered and closed vans and wagons with system-based lightweight design : Ex 8606.91</p> <p>Open vans and wagons, with non-removable sides of a height exceeding 60 cm, with system-based lightweight design : Ex 8606.92</p> <p>Other railway goods vans and wagons with system-based lightweight design : Ex 8606.99</p> <p>Parts suitable for use solely or principally with locomotives with system-based lightweight design : Ex 8607.91</p> <p>Parts suitable for use solely or principally with railway passenger coaches (whether or not self-propelled) or with goods vans and wagons, with system-based lightweight design :</p>	<p>trucks, other than those of heading 86.04. 8603.10 - Powered from an external source of electricity 8603.90 - Other</p> <p>Heading 86.05 : Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04). 8605.00 Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04)</p> <p>Heading 86.06 : Railway or tramway goods vans and wagons, not self-propelled. 8606.10 - Tank wagons and the like 8606.30 - Self-discharging vans and wagons, other than those of subheading 8606.10 - Other : 8606.91 - - Covered and closed 8606.92 - - Open, with non-removable sides of a height exceeding 60 cm 8606.99 - - Other</p> <p>Heading 86.07 : Parts of railway or tramway locomotives or rolling-stock. - Other : 8607.91 - - Of locomotives 8607.99 - - Other</p>
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		Ex 8607.99	
<i>Regenerative Braking</i>	<ul style="list-style-type: none"> On-board energy storage in DC systems 	<p>Locomotives with on-board energy storage, powered from an external source of electricity : Ex 8601.10</p> <p>Locomotives with on-board energy storage, powered by electric accumulators : Ex 8601.20</p> <p>Locomotives with on-board energy storage, powered by a diesel-electric engine : Ex 8602.10</p> <p>Self-propelled railway coaches with on-board energy storage , powered from an external source of electricity : Ex 8603.10</p> <p>Self-propelled electrical railway coaches with on-board energy storage, not powered from an external source of electricity : Ex 8603.90</p> <p>Not self-propelled railway coaches with on-board energy storage : Ex 8605.00</p> <p>Parts suitable for use solely or principally with locomotives with on-board energy storage : Ex 8607.91</p> <p>Parts suitable for use solely or principally with railway passenger coaches with on-board energy storage : Ex 8607.99</p>	<p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity 8601.20 - Powered by electric accumulators</p> <p>Heading 86.02 : Other rail locomotives; locomotive tenders. 8602.10 - Diesel-electric locomotives</p> <p>Heading 86.03 : Self-propelled railway or tramway coaches, vans and trucks, other than those of heading 86.04. 8603.10 - Powered from an external source of electricity 8603.90 - Other</p> <p>Heading 86.05 : Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04). 8605.00 Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04)</p> <p>Heading 86.07 : Parts of railway or tramway locomotives or rolling-stock. - Other : 8607.91 -- Of locomotives 8607.99 -- Other</p>
	<ul style="list-style-type: none"> Stationary energy storage 	Locomotives with stationary energy storage, powered from an external source of electricity : Ex 8601.10	<p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an</p>

			<p>Locomotives with stationary energy storage, powered by electric accumulators : Ex 8601.20</p> <p>Locomotives with stationary energy storage, powered by a diesel-electric engine : Ex 8602.10</p> <p>Self-propelled railway coaches with stationary energy storage, powered from an external source of electricity : Ex 8603.10</p> <p>Self-propelled electrical railway coaches with stationary energy storage, not powered from an external source of electricity : Ex 8603.90</p> <p>Not self-propelled railway coaches with stationary energy storage : Ex 8605.00</p> <p>Parts suitable for use solely or principally with locomotives with stationary energy storage : Ex 8607.91</p> <p>Parts suitable for use solely or principally with railway passenger coaches with stationary energy storage : Ex 8607.99</p>	<p>external source of electricity 8601.20 - Powered by electric accumulators</p> <p>Heading 86.02 : Other rail locomotives; locomotive tenders. 8602.10 - Diesel-electric locomotives</p> <p>Heading 86.03 : Self-propelled railway or tramway coaches, vans and trucks, other than those of heading 86.04. 8603.10 - Powered from an external source of electricity 8603.90 - Other</p> <p>Heading 86.05 : Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04). 8605.00 Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04)</p> <p>Heading 86.07 : Parts of railway or tramway locomotives or rolling-stock. - Other : 8607.91 - - Of locomotives 8607.99 - - Other</p>
	<ul style="list-style-type: none"> Batteries (storage technology) 	<p>Lead-acid accumulators : 8507.20</p> <p>Nickel-cadmium accumulators : 8507.30</p> <p>Nickel-iron accumulators : 8507.40</p> <p>Other accumulators : 8507.80</p> <p>Parts of accumulators :</p>	<p>Heading 85.07 : Electric accumulators, including separators therefore, whether or not rectangular (including square). 8507.20 – Other lead-acid accumulators 8507.30 – Nickel-cadmium 8507.40 – Nickel-iron 8507.80 – Other accumulators 8507.90 – Parts</p>	

		<ul style="list-style-type: none"> Superconducting Magnetic Energy Storage (storage technology) 	<p>8507.90</p> <p>Superconducting magnetic energy storage : Ex 8504.40</p> <p>Locomotives with superconducting magnetic energy storage technology, powered from an external source of electricity : Ex 8601.10</p> <p>Locomotives with superconducting magnetic energy storage technology, powered by electric accumulators : Ex 8601.20</p> <p>Locomotives with superconducting magnetic energy storage technology, powered by a diesel-electric engine : Ex 8602.10</p> <p>Self-propelled railway coaches with superconducting magnetic energy storage technology, powered from an external source of electricity : Ex 8603.10</p> <p>Self-propelled electrical railway coaches with superconducting magnetic energy storage technology, not powered from an external source of electricity : Ex 8603.90</p> <p>Not self-propelled railway coaches with superconducting magnetic energy storage technology : Ex 8605.00</p>	<p>Heading 85.04 : Electrical transformers, static converters (for example, rectifiers) and inductors. 8504.40 - Static converters</p> <p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity 8601.20 - Powered by electric accumulators</p> <p>Heading 86.02 : Other rail locomotives; locomotive tenders. 8602.10 - Diesel-electric locomotives</p> <p>Heading 86.03 : Self-propelled railway or tramway coaches, vans and trucks, other than those of heading 86.04. 8603.10 - Powered from an external source of electricity 8603.90 - Other</p> <p>Heading 86.05 : Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04). 8605.00 Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special purpose railway or tramway coaches, not self-propelled (excluding those of heading 86.04)</p>
	<p><i>Higher Efficiency Propulsion Systems</i></p>	<ul style="list-style-type: none"> superconducting on-board transformers 	<p>Superconducting on-board transformers, having a power handling capacity exceeding 500 kVA : Ex 8504.34</p>	<p>Heading 85.04 : Electrical transformers, static converters (for example, rectifiers) and inductors. - Other transformers :</p>

			<p>Locomotives with superconducting on-board transformer technology, powered from an external source of electricity : Ex 8601.10</p> <p>Self-propelled railway coaches with superconducting on-board transformers, powered from an external source of electricity : Ex 8603.10</p>	<p>8504.34 - - Having a power handling capacity exceeding 500 kVA</p> <p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity</p> <p>Heading 86.03 : Self-propelled railway or tramway coaches, vans and trucks, other than those of heading 86.04. 8603.10 - Powered from an external source of electricity</p>
	<ul style="list-style-type: none"> • permanent magnet synchronous traction motors 	<p>Permanent magnet synchronous traction motors, AC-multi-phase, of an output exceeding 75 kW : Ex 8501.53</p> <p>Locomotives with permanent magnet synchronous traction motors, powered from an external source of electricity : Ex 8601.10</p> <p>Locomotives with permanent magnet synchronous traction motors, powered by electric accumulators : Ex 8601.20</p> <p>Locomotives with permanent magnet synchronous traction motors, powered by a diesel-electric engine : Ex 8602.10</p> <p>Self-propelled railway coaches with permanent magnet synchronous traction motors, powered from an external source of electricity : Ex 8603.10</p> <p>Self-propelled electrical railway coaches with permanent magnet</p>	<p>Heading 85.01 : Electric motors and generators (excluding generating sets). - Other AC motors, multi-phase : 8501.53 - - Of an output exceeding 75 kW</p> <p>Heading 86.01 : Rail locomotives powered from an external source of electricity or by electric accumulators. 8601.10 - Powered from an external source of electricity 8601.20 - Powered by electric accumulators</p> <p>Heading 86.02 : Other rail locomotives; locomotive tenders. 8602.10 - Diesel-electric locomotives</p> <p>Heading 86.03 : Self-propelled railway or tramway coaches, vans and trucks, other than those of heading 86.04. 8603.10 - Powered from an external source of electricity 8603.90 - Other</p> <p>Heading 86.07 : Parts of railway or tramway locomotives or rolling-stock. - Bogies, bissel-bogies, axles</p>	

			<p>synchronous traction motors, not powered from an external source of electricity : Ex 8603.90</p> <p>Driving bogies and bissel-bogies with permanent magnet synchronous traction motors : Ex 8607.11</p> <p>Axles and wheels fitted with permanent magnet synchronous traction motors : Ex 8607.19</p> <p>Other parts suitable for use solely or principally with locomotives with permanent magnet synchronous traction motors : Ex 8607.91</p> <p>Other parts suitable for use solely or principally with self-propelled railway passenger coaches with permanent magnet synchronous traction motors : Ex 8607.99</p>	<p>and wheels, and parts thereof :</p> <p>8607.11 -- Driving bogies and bissel-bogies</p> <p>8607.19 -- Other, including parts</p> <p>- Other :</p> <p>8607.91 -- Of locomotives</p> <p>8607.99 -- Other</p>

AVIATION

Sector	Technology/F unction	Technology sub- category and Goods (With Technical Description)	HS-Code/Ex-out	Observations
<p>Aviation</p>	<p><i>Engines</i></p>	<ul style="list-style-type: none"> geared turbofan engine, fan and turbine spin independently. The fan is larger and it spins at one-third the speed of the turbine, creating a quieter, more powerful engine 	<p>Geared turbofan engines of a thrust not exceeding 25 kN : Ex 8411.11</p> <p>Geared turbofan engines of a thrust exceeding 25 kN : Ex 8411.12</p> <p>Parts of geared turbofan engines : Ex 8411.91</p>	<p>Heading 84.11 : Turbo-jets, turbo-propellers and other gas turbines.</p> <p>- Turbo-jets : 8411.11 -- Of a thrust not exceeding 25 kN 8411.12 -- Of a thrust exceeding 25 kN</p> <p>- Parts : 8411.91 -- Of turbo-jets or turbo-propellers</p>
		<ul style="list-style-type: none"> TAPS combustor 	<p>Combustion chambers with twin annular premixing swirler (TAPS) : Ex 8411.91</p>	<p>Heading 84.11 : Turbo-jets, turbo-propellers and other gas turbines.</p> <p>- Parts : 8411.91 -- Of turbo-jets or turbo-propellers</p>
		<ul style="list-style-type: none"> high-pressure 10-stage compressor 	<p>High pressure 10 stage compressor : Ex 8414.80</p>	<p>Heading 84.14 : Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters.</p> <p>8414.80 – Other</p>
	<p><i>Aircraft Developments</i></p>	<ul style="list-style-type: none"> lightweight composite materials 	<p>Aircraft of an unladen weight exceeding 15,000 kg, built with lightweight composite materials : Ex 8802.40</p>	<p>Heading 88.02 : Other aircraft (for example, helicopters, aeroplanes); spacecraft (including satellites) and suborbital and spacecraft launch vehicles.</p> <p>8802.40 - Aeroplanes and other aircraft, of an unladen weight exceeding 15,000 kg</p>
		<ul style="list-style-type: none"> Laminar flow technology, reduced airframe drag through control of the boundary layer 	<p>Aircraft of an unladen weight exceeding 15,000 kg, built with laminar flow technology : Ex 8802.40</p>	<p>Heading 88.02 : Other aircraft (for example, helicopters, aeroplanes); spacecraft (including satellites) and suborbital and spacecraft launch vehicles.</p> <p>8802.40 - Aeroplanes and other aircraft, of an unladen weight exceeding 15,000 kg</p>
		<ul style="list-style-type: none"> blended wing bodies 	<p>Blended wing bodies aircraft of an unladen</p>	<p>Heading 88.02 : Other aircraft (for example,</p>

			weight exceeding 15,000 kg : Ex 8802.40	helicopters, aeroplanes); spacecraft (including satellites) and suborbital and spacecraft launch vehicles. 8802.40 - Aeroplanes and other aircraft, of an unladen weight exceeding 15,000 kg
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SHIPPING

Sector	Technology/F unction	Technology sub- category and Goods (With Technical Description)	HS-Code/Ex-out	Observations
Shipping	Engines	<ul style="list-style-type: none"> “geared” propulsion system, changing from two-engine mode to single engine mode when slowing down 	<p>“Geared” diesel propulsion system : Ex 8408.10</p> <p>Cruise ships and similar vessels principally designed for the transport of persons, having a “geared” propulsion system : Ex 8901.10</p> <p>Ferry-boats having a “geared” propulsion system : Ex 8901.10</p> <p>Tankers having a “geared” propulsion system : Ex 8901.20</p> <p>Refrigerated vessels having a “geared” propulsion system : Ex 8901.30</p> <p>Other vessels for the transport of goods having a “geared” propulsion system : Ex 8901.90</p> <p>Other vessels for the transport of both persons and goods, having a “geared” propulsion system : Ex 8901.90</p> <p>Fishing vessels having a “geared” propulsion system : Ex 8902.00</p> <p>Factory ships and other vessels for processing or preserving fishery products, having a “geared” propulsion system : Ex 8902.00</p> <p>Warships having a “geared” propulsion system : Ex 8906.10</p>	<p>Heading 84.08 : Compression-ignition internal combustion piston engines (diesel or semi-diesel). 8408.10 - Marine propulsion engines</p> <p>Heading 89.01 : Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods. 8901.10 - Cruise ships, excursion boats and similar vessels principally designed for the transport of persons; ferry-boats of all kinds 8901.20 - Tankers 8901.30 - Refrigerated vessels, other than those of subheading 8901.20 8901.90 - Other vessels for the transport of goods and other vessels for the transport of both persons and goods</p> <p>Heading 89.02 : Fishing vessels; factory ships and other vessels for processing or preserving fishery products. 8902.00 Fishing vessels; factory ships and other vessels for processing or preserving fishery products</p> <p>Heading 89.06 : Other vessels, including warships and lifeboats other than rowing boats. 8906.10 - Warships</p>

		<ul style="list-style-type: none"> • electric transmission, generators and motors connected by cables 	<p>Cruise ships and similar vessels principally designed for the transport of persons, having an electric generator/motor transmission system : Ex 8901.10</p> <p>Ferry-boats having an electric generator/motor transmission system : Ex 8901.10</p> <p>Tankers having an electric generator/motor transmission system : Ex 8901.20</p> <p>Refrigerated vessels having an electric generator/motor transmission system : Ex 8901.30</p> <p>Other vessels for the transport of goods having an electric generator/motor transmission system : Ex 8901.90</p> <p>Other vessels for the transport of both persons and goods, having an electric generator/motor transmission system : Ex 8901.90</p> <p>Fishing vessels having an electric generator/motor transmission system : Ex 8902.00</p> <p>Factory ships and other vessels for processing or preserving fishery products, having an electric generator/motor transmission system : Ex 8902.00</p> <p>Warships having an electric generator/motor transmission system : Ex 8906.10</p>	<p>Heading 89.01 : Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods. 8901.10 - Cruise ships, excursion boats and similar vessels principally designed for the transport of persons; ferry-boats of all kinds 8901.20 - Tankers 8901.30 - Refrigerated vessels, other than those of subheading 8901.20 8901.90 - Other vessels for the transport of goods and other vessels for the transport of both persons and goods</p> <p>Heading 89.02 : Fishing vessels; factory ships and other vessels for processing or preserving fishery products. 8902.00 Fishing vessels; factory ships and other vessels for processing or preserving fishery products</p> <p>Heading 89.06 : Other vessels, including warships and lifeboats other than rowing boats. 8906.10 - Warships</p>
		<ul style="list-style-type: none"> • waste heat recovery technology, from the main engine exhaust gas very attractive 	<p>Cruise ships and similar vessels principally designed for the transport of persons, using waste heat recovery technology : Ex 8901.10</p> <p>Ferry-boats using waste heat recovery technology :</p>	<p>Heading 89.01 : Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods. 8901.10 - Cruise ships, excursion boats and similar vessels</p>

			<p>Ex 8901.10</p> <p>Tankers using waste heat recovery technology : Ex 8901.20</p> <p>Refrigerated vessels using waste heat recovery technology : Ex 8901.30</p> <p>Other vessels for the transport of goods using waste heat recovery technology : Ex 8901.90</p> <p>Other vessels for the transport of both persons and goods, using waste heat recovery technology : Ex 8901.90</p> <p>Fishing vessels using waste heat recovery technology : Ex 8902.00</p> <p>Factory ships and other vessels for processing or preserving fishery products, using waste heat recovery technology : Ex 8902.00</p> <p>Warships using waste heat recovery technology : Ex 8906.10</p>	<p>principally designed for the transport of persons; ferry-boats of all kinds</p> <p>8901.20 - Tankers</p> <p>8901.30 - Refrigerated vessels, other than those of subheading 8901.20</p> <p>8901.90 - Other vessels for the transport of goods and other vessels for the transport of both persons and goods</p> <p>Heading 89.02 : Fishing vessels; factory ships and other vessels for processing or preserving fishery products.</p> <p>8902.00 Fishing vessels; factory ships and other vessels for processing or preserving fishery products</p> <p>Heading 89.06 : Other vessels, including warships and lifeboats other than rowing boats.</p> <p>8906.10 - Warships</p>
	<p><i>Ship Design and Hydrodynamics (Hull and Propeller)</i></p>	<ul style="list-style-type: none"> Counter-Rotating Propellers (CRP) 	<p>Cruise ships and similar vessels principally designed for the transport of persons, having counter rotating propellers : Ex 8901.10</p> <p>Ferry-boats having counter rotating propellers : Ex 8901.10</p> <p>Tankers having counter rotating propellers : Ex 8901.20</p> <p>Refrigerated vessels having counter rotating propellers : Ex 8901.30</p> <p>Other vessels for the transport of goods having counter rotating propellers : Ex 8901.90</p> <p>Other vessels for the</p>	<p>Heading 89.01 : Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods.</p> <p>8901.10 - Cruise ships, excursion boats and similar vessels principally designed for the transport of persons; ferry-boats of all kinds</p> <p>8901.20 - Tankers</p> <p>8901.30 - Refrigerated vessels, other than those of subheading 8901.20</p> <p>8901.90 - Other vessels for the transport of goods and other vessels for the transport of both</p>

			<p>transport of both persons and goods, having counter rotating propellers : Ex 8901.90</p> <p>Fishing vessels having counter rotating propellers : Ex 8902.00</p> <p>Factory ships and other vessels for processing or preserving fishery products, having counter rotating propellers : Ex 8902.00</p> <p>Warships having counter rotating propellers : Ex 8906.10</p>	<p>persons and goods</p> <p>Heading 89.02 : Fishing vessels; factory ships and other vessels for processing or preserving fishery products. 8902.00 Fishing vessels; factory ships and other vessels for processing or preserving fishery products</p> <p>Heading 89.06 : Other vessels, including warships and lifeboats other than rowing boats. 8906.10 - Warships</p>
	<ul style="list-style-type: none"> • Hull with optimization design 		<p>Cruise ships and similar vessels principally designed for the transport of persons, having an optimized hull design : Ex 8901.10</p> <p>Ferry-boats having an optimized hull design : Ex 8901.10</p> <p>Tankers having an optimized hull design : Ex 8901.20</p> <p>Refrigerated vessels having an optimized hull design : Ex 8901.30</p> <p>Other vessels for the transport of goods having an optimized hull design : Ex 8901.90</p> <p>Other vessels for the transport of both persons and goods, having an optimized hull design : Ex 8901.90</p> <p>Fishing vessels having an optimized hull design : Ex 8902.00</p> <p>Factory ships and other vessels for processing or preserving fishery products, having an optimized hull design : Ex 8902.00</p> <p>Warships having an</p>	<p>Heading 89.01 : Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods. 8901.10 - Cruise ships, excursion boats and similar vessels principally designed for the transport of persons; ferry-boats of all kinds 8901.20 - Tankers 8901.30 - Refrigerated vessels, other than those of subheading 8901.20 8901.90 - Other vessels for the transport of goods and other vessels for the transport of both persons and goods</p> <p>Heading 89.02 : Fishing vessels; factory ships and other vessels for processing or preserving fishery products. 8902.00 Fishing vessels; factory ships and other vessels for processing or preserving fishery products</p> <p>Heading 89.06 : Other vessels, including warships and lifeboats other</p>

			optimized hull design : Ex 8906.10	than rowing boats. 8906.10 - Warships
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Table 2: Climate Mitigation Goods Undergoing R&D with Strong Prospects for Commercialisation- Same format as Table 1

ROAD TRANSPORT

Sector	Technology/Function	Technology sub-category and Goods (With Technical Description)	HS-Code/Ex-out	Observations
		<p><u>Hydrogen/Fuel Cells</u></p> <ul style="list-style-type: none"> hydrogen internal combustion engines, burn fuel in the same manner that gasoline engines do. 	<p>Spark-ignition reciprocating hydrogen internal combustion piston engines of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc : Ex 8407.33</p> <p>Spark-ignition reciprocating hydrogen internal combustion piston engines of a kind used for the propulsion of vehicles of Chapter 87, of a cylinder capacity exceeding 1,000 cc : Ex 8407.34</p> <p>Spark-ignition rotary hydrogen internal combustion piston engines of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8409.90</p> <p>Parts suitable for use solely or principally with spark-ignition hydrogen internal combustion piston engines, of a kind used for the propulsion of vehicles of Chapter 87 : Ex 8409.91</p> <p>Road tractors for semi-trailers with hydrogen internal combustion engine : Ex 8701.20</p> <p>Vehicles for the transport of ten or more persons, including the driver :</p>	<p>Heading 84.07 : Spark-ignition reciprocating or rotary internal combustion piston engines.</p> <p>- Reciprocating piston engines of a kind used for the propulsion of vehicles of Chapter 87 : 8407.33 - - Of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc 8407.34 - - Of a cylinder capacity exceeding 1,000 cc 8407.90 - Other engines</p> <p>Heading 84.09 : Parts suitable for use solely or principally with the engines of heading 84.07 or 84.08.</p> <p>- Other : 8409.91 - - Suitable for use solely or principally with spark-ignition internal combustion piston engines</p> <p>Heading 87.01 : Tractors (other than tractors of heading 87.09). 8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other</p>

		<ul style="list-style-type: none"> Fuel cells, create electricity to power an electric motor using hydrogen fuel and oxygen from the air 	<p>With spark-ignition hydrogen engine : Ex 8702.90</p> <p>Other motor cars for the transport of persons :</p> <p>With spark-ignition hydrogen engine: Not exceeding 1,000 cc : Ex 8703.21 Exceeding 1,000 cc but not exceeding 1,500 cc : Ex 8703.22 Exceeding 1,500 cc but not exceeding 3,000 cc : Ex 8703.23 Exceeding 3,000 cc : Ex 8703.24</p> <p>With other hydrogen engine (e.g., Wankel) : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With spark-ignition hydrogen engine and a g.v.w. not exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.31</p> <p>With spark-ignition hydrogen engine and a g.v.w. exceeding 5 tonnes (other than dumpers designed for off-highway use) : Ex 8704.32</p> <p>Primary fuel cell : Ex 8506.80</p> <p>Parts of primary fuel cells : Ex 8506.90</p> <p>Road tractors for semi-trailers :</p> <p>With electric engine : Ex 8701.20</p> <p>Vehicles for the transport of ten or more persons, including the driver :</p> <p>With electric engine : Ex 8702.90</p>	<p>motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars.</p> <p>- Other vehicles, with spark-ignition internal combustion reciprocating piston engine :</p> <p>8703.21 -- Of a cylinder capacity not exceeding 1,000 cc</p> <p>8703.22 -- Of a cylinder capacity exceeding 1,000 cc but not exceeding 1,500 cc</p> <p>8703.23 -- Of a cylinder capacity exceeding 1,500 cc but not exceeding 3,000 cc</p> <p>8703.24 -- Of a cylinder capacity exceeding 3,000 cc</p> <p>8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods.</p> <p>- Other, with spark-ignition internal combustion piston engine :</p> <p>8704.31 -- g.v.w. not exceeding 5 tonnes</p> <p>8704.32 -- g.v.w. exceeding 5 tonnes</p> <p>Heading 85.06 : Primary cells and primary batteries.</p> <p>8506.80 - Other</p> <p>8506.90 - Parts</p> <p>Heading 87.01 : Tractors (other than tractors of heading 87.09).</p>
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		<p>Other motor cars for the transport of persons :</p> <p>With electric engine : Ex 8703.90</p> <p>Vehicles for the transport of goods :</p> <p>With electric engine (other than dumpers designed for off-highway use) : Ex 8704.90</p>	<p>8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars. 8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods. 8704.90 - Other</p>	<p>8701.20 – Road tractors for semi-trailers</p> <p>Heading 87.02 : Motor vehicles for the transport of ten or more persons, including the driver. 8702.90 – Other</p> <p>Heading 87.03 : Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars. 8703.90 - Other</p> <p>Heading 87.04 : Motor vehicles for the transport of goods. 8704.90 - Other</p>
		<ul style="list-style-type: none"> • Hydrogen storage by cryogenic tank • Hydrogen storage by compressed hydrogen storage tank 	<p>Hydrogen storage tank of iron or steel : Ex 7311.00</p> <p>Hydrogen storage tank of aluminium : Ex 7613.00</p>	<p>Heading 73.11 : Containers for compressed or liquefied gas, of iron or steel. 7311.00 Containers for compressed or liquefied gas, of iron or steel</p> <p>Heading 76.13 : Aluminium containers for compressed or liquefied gas. 7613.00 Aluminium containers for compressed or liquefied gas</p>

AVIATION

Sector	Technology/F unction	Technology sub- category and Goods (With Technical Description)	HS-Code/Ex-out	Observations
	<i>Alternative Fuels for Aviation</i>	<ul style="list-style-type: none"> Hydrogen engine 	<p>Spark-ignition reciprocating or rotary internal combustion piston engines of a kind used for aircraft, capable of being powered by compressed hydrogen : Ex 8407.10</p> <p>Parts suitable for use solely or principally with spark-ignition internal combustion piston engines, of a kind used for aircraft, capable of being powered by compressed hydrogen : Ex 8409.10</p>	<p>Heading 84.07 : Spark-ignition reciprocating or rotary internal combustion piston engines. 8407.10 - Aircraft engines</p> <p>Heading 84.09 : Parts suitable for use solely or principally with the engines of heading 84.07 or 84.08. 8409.10 - For aircraft engines</p>
		<ul style="list-style-type: none"> Hydrogen fuel cell 	<p>Primary fuel cell : Ex 8506.80</p> <p>Parts of primary fuel cells : Ex 8506.90</p>	<p>Heading 85.06 : Primary cells and primary batteries. 8506.80 - Other 8506.90 - Parts</p>
		<ul style="list-style-type: none"> biofuels 	<p>Ethanol (ethyl alcohol), undenatured, of an alcoholic strength by volume of 80% vol or higher : 2207.10</p> <p>Ethanol (ethyl alcohol), denatured, of any strength : 2207.20</p> <p>Ethanol mixed with 70% or more light petroleum oils : Ex 2710.11</p> <p>Methanol mixed with 70% or more light petroleum oils : Ex 2710.11</p> <p>Biodiesel mixed with 70% or more light petroleum oils : Ex 2710.11</p> <p>Methanol (methyl alcohol), not mixed : 2905.11</p> <p>Ethanol mixed with less than 70% light petroleum oils : Ex 3824.90</p>	<p>Heading 22.07 : Undenatured ethyl alcohol of an alcoholic strength by volume of 80 % vol or higher; ethyl alcohol and other spirits, denatured, of any strength. 2207.10 - Undenatured ethyl alcohol of an alcoholic strength by volume of 80 % vol or higher 2207.20 - Ethyl alcohol and other spirits, denatured, of any strength</p> <p>Heading 27.10 : Petroleum oils and oils obtained from bituminous minerals, other than crude; preparations not elsewhere specified or included, containing by weight 70% or more of petroleum oils or of oils obtained from bituminous minerals, these oils being the basic constituents of the preparations; waste oils. - Petroleum oils and oils obtained from bituminous minerals (other than crude) and preparations not</p>

			<p>Methanol mixed with less than 70% light petroleum oils : Ex 3824.90</p> <p>Biodiesel : Ex 3824.90</p>	<p>elsewhere specified or included, containing by weight 70% or more of petroleum oils or of oils obtained from bituminous minerals, these oils being the basic constituents of the preparations, other than waste oils :</p> <p>2710.11 - - Light oils and preparations</p> <p>Heading 29.05 : Acyclic alcohols and their halogenated, sulphonated, nitrated or nitrosated derivatives. - Saturated monohydric alcohols : 2905.11 - - Methanol (methyl alcohol)</p> <p>Heading 38.24 : Prepared binders for foundry moulds or cores; chemical products and preparations of the chemical or allied industries (including those consisting of mixtures of natural products), not elsewhere specified or included. 3824.90 - Other</p>
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SHIPPING

Sector	Technology/F unction	Technology sub- category and Goods (With Technical Description)	HS-Code/Ex-out	Observations
	<i>Alternative Fuels for Shipping</i>	<ul style="list-style-type: none"> • natural gas <hr/> <ul style="list-style-type: none"> • Biofuel utilization : bio-diesel, ethanol 	<p>Liquefied natural gas : 2711.11</p> <p>Natural gas in gaseous state : 2711.21</p> <hr/> <p>Ethanol (ethyl alcohol), undenatured, of an alcoholic strength by volume of 80% vol or higher : 2207.10</p> <p>Ethanol (ethyl alcohol), denatured, of any strength : 2207.20</p> <p>Ethanol mixed with 70% or more light petroleum oils : Ex 2710.11</p> <p>Biodiesel mixed with 70% or more light petroleum oils : Ex 2710.11</p> <p>Ethanol mixed with less than 70% light petroleum oils : Ex 3824.90</p> <p>Biodiesel : Ex 3824.90</p>	<p>Heading 27.11 : Petroleum gases and other gaseous hydrocarbons. - Liquefied : 2711.11 -- Natural gas - In gaseous state : 2711.21 -- Natural gas</p> <hr/> <p>Heading 22.07 : Undenatured ethyl alcohol of an alcoholic strength by volume of 80 % vol or higher; ethyl alcohol and other spirits, denatured, of any strength. 2207.10 - Undenatured ethyl alcohol of an alcoholic strength by volume of 80 % vol or higher 2207.20 - Ethyl alcohol and other spirits, denatured, of any strength</p> <p>Heading 27.10 : Petroleum oils and oils obtained from bituminous minerals, other than crude; preparations not elsewhere specified or included, containing by weight 70% or more of petroleum oils or of oils obtained from bituminous minerals, these oils being the basic constituents of the preparations; waste oils. - Petroleum oils and oils obtained from bituminous minerals (other than crude) and preparations not elsewhere specified or included, containing by weight 70% or more of petroleum oils or of oils obtained from bituminous minerals, these oils being the basic constituents of the preparations, other than waste oils : 2710.11 -- Light oils and preparations</p> <p>Heading 29.05 :</p>

		<ul style="list-style-type: none"> Solar PV 	<p>Solar photovoltaic modules : Ex 8541.40</p>	<p>Acyclic alcohols and their halogenated, sulphonated, nitrated or nitrosated derivatives. - Saturated monohydric alcohols : 2905.11 - - Methanol (methyl alcohol)</p> <p>Heading 38.24 : Prepared binders for foundry moulds or cores; chemical products and preparations of the chemical or allied industries (including those consisting of mixtures of natural products), not elsewhere specified or included. 3824.90 - Other</p> <p>Heading 85.41: Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes; mounted piezo-electric crystals. 8541.40 - Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes</p>
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