



PHILIP MORRIS INTERNATIONAL

Guide to the Tobacco and Nicotine Database

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Foreword

Our vision at PMI is that scientifically substantiated reduced-risk products (RRPs) will eventually replace cigarettes to the benefit of consumers, society, the company and our shareholders. We are committed to turning this vision into reality and are doing our part by offering millions of men and women who smoke cigarettes a choice of less harmful, yet satisfying, alternatives to smoking.

But PMI does not work alone. We work with an entire value chain from growers, suppliers, and distributors to retailers and we recognize that transforming our business will have implications for many.

This is why PMI built the Tobacco and Nicotine Database. The Database allows users to access available country data on the tobacco and nicotine products across the value chain. It also helps develop a common understanding of the socio-economic dimensions of this sector around the world and form a basis for analyzing long-term policy scenarios.

Because we know that we cannot make this vision for a smoke-free future a reality without the help of others, the company has decided from the start to share this tool on its website. The database includes more than 130 variables across 191 countries, representing approximately 20,000 data points per year. As a result, any stakeholder will be able to access the comprehensive dataset that can form the basis for their own policy analysis and impact assessment work.

PMI is confident of the value of this tool and encourages you to contact us at database@pmi.com should you have any information or data points that you believe should be included, supplemented or modified.

Background Information

What information does the database contain?

This global database covers both combustible and non-combustible tobacco and other nicotine-containing products. This includes factory-manufactured cigarettes, cigars & cigarillos, fine-cut tobacco (also referred to as roll-your-own and make-your-own), smokeless tobacco (e.g., snus) and other tobacco products, as well as e-cigarettes and heated tobacco products. Data on those products span the entire supply chain – from tobacco growing, first processing, manufacturing and distribution to taxation, illicit trade and consumers.

What is the scope of the database?

This database is not specific to PMI; rather, it provides an overview of the entire industry and value chain. The database includes every country (as defined by the UN) in the world and covers over 130 variables per country.

How is this data collected?

PMI gathers this data working with a cross-functional project team of subject-matter experts within the company, and also works closely with [Nomisma](#), an economic research company based in Bologna, Italy. Nomisma reaches out to relevant associations and third parties around the world to identify relevant data sources.

What kind of variables can I find in this database?

The database aggregates relevant data from hundreds of studies and publications into a single source*. It includes economic variables such as number of establishments (tobacco farms, processing and manufacturing facilities, retail outlets, etc.), employment, value added along the entire supply chain, as well as other variables of interest such as government revenues from tobacco taxation, illicit trade volumes and number of tobacco product users.

Most of the definitions for the variables in the database are based on assessment standards applied by third-party sources. The reference definition source is provided, whenever available, in the [table of variables definitions](#).

Where does the data come from?

This database is as much as possible based on publicly available sources. We also use data from subscription-based resources as well as information from experts within our company, who provide industry-wide estimates.

In cases where multiple sources are available for the same variable, we follow a rule of source prioritization which was developed to ensure the quality and transparency of the collected data:

- 1) Official sources, such as governmental data, statistical offices, official reports and international organizations (e.g., FAO, WHO, UN, Eurobarometer, etc.)
- 2) Nomisma calculation and PMI-commissioned sources (e.g. KPMG Stella Report)
- 3) External restricted sources (with rights for release)
- 4) PMI internal estimates.

The database shows which data source was used, together with its corresponding link, if available.

** Methodologies, assumptions and opinions used by third parties in the preparation of their estimates are theirs alone and do not represent, and may conflict with, our estimates, methodologies, assumptions and opinions, and we do not offer a view on the approaches and methodologies used in such estimates.*

How many years does the database cover?

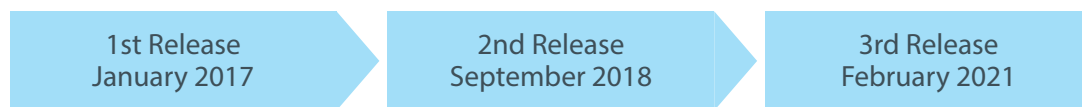
In the 3rd release of the database, we include nine years of data, starting from 2010. We plan to add more recent estimates with each release.

In order to guarantee consistency and usability of the historical data, we try as much as possible to use the same source for all years of data, consistently following the source prioritization rule. When a more reliable and complete source becomes available, retrospective change may be applied.

Local currency vs data in USD

All data points are collected and reported in local currency, when available. To be able to group and compare data across countries we translate all currencies into USD. The currency exchange rates used are also published and are based on the official exchange rates published by the IMF.

Releases and future updates



In the first two releases, data was collected only for the most recently available year. The 3rd release instead contains historical data, enabling cross-sectional and time-series analysis. We intend to update this database on a regular basis (annual) and all updates will be available on PMI's corporate website at www.pmi.com.

How can you help?

To our knowledge, this database is the most comprehensive global database on the tobacco and nicotine market. At times, we had to use certain assumptions. These assumptions, with respect to each applicable variable, are described in detail in the database. In light of these assumptions and other factors, some of the information presented may not be entirely accurate or complete. Our vision is to continuously improve the database with your help and share our knowledge to foster common understanding and analysis of the sector.

If you have any questions, suggestions or feedback, please contact us at database@pmi.com.

Classifications and Definitions

What are the various value chain phases?

The database is divided into eight different topics representing the various value chain phases.

Number	Supply Chain Phase Name
1	Tobacco growing
2	Tobacco first processing
3	Tobacco and nicotine product manufacturing
4	Suppliers of the manufacturing industry
5	Distributive trade
6	Taxes
7	Illicit trade
8	Consumers

How are the variables labelled?

Each variable is labelled in the following way: "Supply Chain Phase numerical code"_"Variable numerical code"_"Variable name"_"Measurement unit"

For example, the variable labelled "1_2 Number of farms, number" indicates that this variable concerns Phase 1 (tobacco growing), is the 2nd variable listed in the database ("_2"), measures the number of farms ("Number of farms") and that the output in the data column is a number ("number").

How are the variables defined?

The following table contains the full list of variables, their respective definitions and the source of reference, if exists (for the whole definition or a part of it).

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
1_1	Tobacco growing	Year start tobacco growing	Year in which the country started growing tobacco.	
1_2	Tobacco growing	Number of farms	Number of business units with tobacco as the main culture.	European association of tobacco growers (UNITAB), Eurostat
1_3	Tobacco growing	Number of growers - full time equivalent	Labor force derived from the ratio of the number of hours worked in a year by the total labor force and the standard working time of a full-time unit employed full-year.	Eurostat
1_4	Tobacco growing	Number of growers - total involved	Labor force (legal age and over*) involved in growing of crops and supporting agricultural and post harvest activities during the year (or seasonally).	Eurostat
1_5	Tobacco growing	Surface area where tobacco is grown	Surface area where tobacco is grown.	Food and Agriculture Organization of the United Nations (FAO)

* Legal age varies across geographies according to the local law. In line with international data sources and for comparison purposes, the reported numbers include labor force of 15 years old and over.

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
1_6	Tobacco growing	Average tobacco surface area per farm	Tobacco surface area divided by the number of tobacco farms.	European association of tobacco growers (UNITAB)
1_7	Tobacco growing	% area dedicated to monoculture	% of total tobacco surface area cultivated as monoculture (the production of only one crop in a field year after year) or % of tobacco surface on total surface of the holding.	
1_8	Tobacco growing	Average agricultural land per farm	Total agricultural land of tobacco farms divided by the number of tobacco farms.	
1_9	Tobacco growing	% of the tobacco production of green leaves (FVC - Flue Cured Virginia)	% share of green leaves of tobacco grown in the country (FVC).	European Federation of Tobacco Processors (FETRATAB)
1_10	Tobacco growing	% of the tobacco production of green leaves (LAC - Light Air Cured) Burley (Maryland)	% share of green leaves of tobacco grown in the country (LAC).	European Federation of Tobacco Processors (FETRATAB), European association of tobacco growers (UNITAB)
1_11	Tobacco growing	% of the tobacco production of green leaves (Oriental)	% share of green leaves of tobacco grown in the country (Oriental).	European Federation of Tobacco Processors (FETRATAB), European association of tobacco growers (UNITAB)
1_12	Tobacco growing	% of the tobacco production of green leaves (other varieties - e.g. Dark Tobaccos, Kentucky)	% share of green leaves of tobacco grown in the country (excl. FVC, LAC and Oriental).	European Federation of Tobacco Processors (FETRATAB), European association of tobacco growers (UNITAB)
1_13	Tobacco growing	Total output volume - raw tobacco	Total tobacco harvested.	Food and Agriculture Organization of the United Nations (FAO)
1_14	Tobacco growing	Average volume raw tobacco output per farm	Total output volume divided by the number of farms.	European association of tobacco growers (UNITAB), European Federation of Tobacco Processors (FETRATAB)
1_15	Tobacco growing	Average value raw tobacco output value per farm	Total output value divided by the number of farms.	European Federation of Tobacco Processors (FETRATAB)
1_16	Tobacco growing	% tobacco farms that grow other crops	% of farms with tobacco as main crop but that grow at least one other crop.	
1_17	Tobacco growing	Total output value	Value of the national raw tobacco harvested expressed at current market prices (farm-gate).	Food and Agriculture Organization of the United Nations (FAO)
2_18	Tobacco first processing	Number of factories processing raw tobacco	Factories processing raw tobacco (sorting, re-humidifying, threshing, re-drying, stabilizing, fumigating and packaging of tobacco leaves) before the delivery to the manufacturing plants. Reconstituted tobacco is also included.	European Federation of Tobacco Processors (FETRATAB), WHO (p.4)
2_19	Tobacco first processing	Average number waged workers per company	Number of waged workers divided by the number of companies.	European Federation of Tobacco Processors (FETRATAB)

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
2_20	Tobacco first processing	Workforce number- full time equivalent	Labor force derived from the ratio of the number of hours worked in a year by the total labor force and the standard working time of a full-time unit employed full-year.	European Federation of Tobacco Processors (FETRATAB), Eurostat
2_21	Tobacco first processing	Workforce number - total involved	Labor force (legal age and over) involved in sorting, re-humidifying, threshing, re-drying, stabilizing, fumigating and packaging of tobacco leaves, before the delivery to the manufacturing plants.	European Federation of Tobacco Processors (FETRATAB), Eurostat
2_22	Tobacco first processing	Value added (first processing industry)	Unless available from official statistics, this value is estimated as the difference between the final production and the value of the raw tobacco purchased by the factories of the tobacco first processing industry.	European Federation of Tobacco Processors (FETRATAB), Eurostat
2_23	Tobacco first processing	Total revenue	Total turnover generated by the enterprise core activity of the first processing of tobacco, including all duties and taxes (exl. VAT), and all other charges.	European Federation of Tobacco Processors (FETRATAB), Eurostat
2_24	Tobacco first processing	Volume imports - unmanufactured tobacco	Volume of imports ¹ of unmanufactured tobacco ² , which is defined as: tobacco, un-stemmed or unstripped; partly or wholly stemmed or stripped tobacco, otherwise unmanufactured.	UN Comtrade¹ , UN Comtrade²
2_25	Tobacco first processing	Value imports - unmanufactured tobacco	Value of imports ¹ of unmanufactured tobacco ² , which is defined as: tobacco, un-stemmed or unstripped; partly or wholly stemmed or stripped tobacco, otherwise unmanufactured.	UN Comtrade¹ , UN Comtrade²
2_26	Tobacco first processing	Volume exports - unmanufactured tobacco	Volume of exports ¹ of unmanufactured tobacco ² , which is defined as: tobacco, un-stemmed or unstripped; partly or wholly stemmed or stripped tobacco, otherwise unmanufactured.	UN Comtrade¹ , UN Comtrade²
2_27	Tobacco first processing	Value exports - unmanufactured tobacco	Value of exports ¹ of unmanufactured tobacco ² , which is defined as: tobacco, un-stemmed or unstripped; partly or wholly stemmed or stripped tobacco, otherwise unmanufactured.	UN Comtrade¹ , UN Comtrade²

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
3_28	Tobacco manufacturing	Number of cigarettes manufactured	Number of cigarettes produced by manufacturing enterprises. This category of tobacco products includes duty-paid, machine manufactured white-stick products and excludes the volume of non-machine manufactured products such as bidis/beedis (India), kreteks (Indonesia), papirosy (Russia), and other smoking products made with tobacco but that either do not resemble cigarettes as recognized in the US or Europe, or those that are not machine manufactured.	Eurostat
3_29	Tobacco manufacturing	Number of cigars and cigarillos manufactured	Number of cigars and cigarillos (defined as miniature cigars weighing less than 3 grams each), produced by manufacturing enterprises.	Eurostat
3_30	Tobacco manufacturing	Volume of other smoking tobacco products manufactured	Volume of pipe tobacco, roll-your-own (RYO) and make-your-own (MYO) tobacco produced by manufacturing enterprises.	Eurostat
3_31	Tobacco manufacturing	Volume of smokeless products manufactured	Volume of smokeless tobacco products (chewing tobacco, snus, snuff, etc.) produced by manufacturing enterprises.	Eurostat
3_32	Tobacco manufacturing	Number of e-cigarettes manufactured	Number of e-cigarettes (liquid and cartridge) manufactured.	
3_33	Tobacco manufacturing	Number of heated tobacco products manufactured	Number of heated tobacco products manufactured.	
3_34	Tobacco manufacturing	Value total tobacco production	Value of cigarettes, cigars & cigarillos, smoking tobacco and smokeless tobacco produced by manufacturers, based on the sales to distribution operators.	Eurostat
3_35	Tobacco manufacturing	Value cigarette production	Value of cigarettes produced by manufacturers, based on the sales to distribution operators.	Eurostat
3_36	Tobacco manufacturing	Value cigars and cigarillos production	Value of cigars and cigarillos produced by manufacturers, based on the sales to distribution operators.	Eurostat
3_37	Tobacco manufacturing	Value other smoking tobacco production	Value of smoking tobacco products produced by manufacturers, based on the sales to distribution operators.	Eurostat
3_38	Tobacco manufacturing	Value smokeless products production	Value of smokeless tobacco products (chewing tobacco, snus, snuff, etc.) produced by manufacturers, based on the sales to distribution operators.	Eurostat
3_39	Tobacco manufacturing	Value e-cigarette production	Value of e-cigarettes (liquid and cartridge) produced.	

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
3_40	Tobacco manufacturing	Value heated tobacco products production	Value of heated tobacco products produced.	
3_41	Tobacco manufacturing	Number tobacco manufacturing establishments	Number of establishments manufacturing tobacco products.	Eurostat
3_42	Tobacco manufacturing	Number smokeless products manufacturing establishments	Number of establishments producing smokeless tobacco products (chewing tobacco, snus, snuff, etc.).	
3_43	Tobacco manufacturing	Number e-cigarette manufacturing establishments	Number of establishments producing e-cigarettes (liquid and cartridge).	
3_44	Tobacco manufacturing	Number heated tobacco products manufacturing establishments	Number of establishments producing heated tobacco products.	
3_45	Tobacco manufacturing	Manufacturing tobacco - Employment number - full time equivalent units	Labor force ¹ derived from the ratio of the number of hours worked in a year by the total labor force and the standard working time of a full-time unit ² employed full-year.	Eurostat¹ , Eurostat²
3_46	Tobacco manufacturing	Manufacturing tobacco - Workforce number - total involved	Labor force (legal age and over) involved in the manufacturing process of tobacco.	Eurostat
3_47	Tobacco manufacturing	Manufacturing smokeless products - Employment number - full time equivalent	Labor force derived from the ratio of the number of hours worked in a year by the total labor force and the standard working time of a full-time unit employed full-year.	Eurostat
3_48	Tobacco manufacturing	Manufacturing smokeless products - Workforce number - total involved	Labor force (legal age and over) involved in the manufacturing process of smokeless products.	Eurostat
3_49	Tobacco manufacturing	Manufacturing e-cigarettes - Employment number - full time equivalent units	Labor force derived from the ratio of the number of hours worked in a year by the total labor force and the standard working time of a full-time unit employed full-year.	Eurostat
3_50	Tobacco manufacturing	Manufacturing e-cigarettes - Workforce number - total involved	Labor force (legal age and over) involved in the manufacturing process of e-cigarettes.	Eurostat
3_51	Tobacco manufacturing	Manufacturing heated tobacco products - Employment number - full time equivalent units	Labor force derived from the ratio of the number of hours worked in a year by the total labor force and the standard working time of a full-time unit employed full-year.	Eurostat
3_52	Tobacco manufacturing	Manufacturing heated tobacco products - Workforce number - total involved	Labor force (legal age and over) involved in the manufacturing process of heated tobacco products.	Eurostat
3_53	Tobacco manufacturing	Value added (manufacturing industry for combustible products)	Unless available from official statistics, this value is calculated from the manufacturing value of the tobacco products, less the purchases of goods (mainly raw material) and services (if these data are available).	Eurostat

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
3_54	Tobacco manufacturing	Value added (manufacturing industry for non-combustible products)	Unless available from official statistics, this value is calculated from the manufacturing value of the non-combustible products, less the purchases of goods (mainly raw material) and services (if these data are available).	Eurostat
3_55	Tobacco manufacturing	Volume exports - cigarettes	Volume of cigarettes that are exported.	UN Comtrade
3_56	Tobacco manufacturing	Volume exports - cigars and cigarillos	Volume of cigars and cigarillos that are exported.	UN Comtrade
3_57	Tobacco manufacturing	Volume exports - other smoking tobacco products	Volume of other smoking products that are exported.	UN Comtrade
3_58	Tobacco manufacturing	Volume exports - smokeless products	Volume of smokeless tobacco products (chewing tobacco, snus, snuff, etc.) that are exported.	UN Comtrade
3_59	Tobacco manufacturing	Volume exports - e-cigarettes	Volume of e-cigarettes (liquid and cartridge) that are exported.	
3_60	Tobacco manufacturing	Volume exports - heated tobacco products	Volume of heated tobacco products that are exported.	
3_61	Tobacco manufacturing	Value exports - cigarettes	Value of cigarettes that are exported.	UN Comtrade
3_62	Tobacco manufacturing	Value exports - cigars and cigarillos	Value of cigars and cigarillos that are exported.	UN Comtrade
3_63	Tobacco manufacturing	Value exports - other smoking tobacco products	Value of other smoking tobacco products that are exported.	UN Comtrade
3_64	Tobacco manufacturing	Value exports - smokeless products	Value of smokeless tobacco products (chewing tobacco, snus, snuff, etc.) that are exported.	UN Comtrade
3_65	Tobacco manufacturing	Value exports - e-cigarettes	Value of e-cigarettes (liquid and cartridge) that are exported.	
3_66	Tobacco manufacturing	Value exports - heated tobacco products	Value of heated tobacco products that are exported.	
3_67	Tobacco manufacturing	Volume imports – cigarettes	Volume of cigarettes that are imported.	UN Comtrade
3_68	Tobacco manufacturing	Volume imports - cigars and cigarillos	Volume of cigars and cigarillos that are imported.	UN Comtrade
3_69	Tobacco manufacturing	Volume imports - other smoking tobacco products	Volume of other smoking tobacco products that are imported.	UN Comtrade
3_70	Tobacco manufacturing	Volume imports - smokeless products	Volume of smokeless tobacco products (chewing tobacco, snus, snuff, etc.) that are imported.	UN Comtrade

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
3_71	Tobacco manufacturing	Volume imports - e-cigarettes	Volume of e-cigarettes (liquid and cartridge) that are imported.	
3_72	Tobacco manufacturing	Volume imports - heated tobacco products	Volume of heated tobacco products that are imported.	
3_73	Tobacco manufacturing	Value imports - cigarettes	Value of imports of cigarettes.	UN Comtrade
3_74	Tobacco manufacturing	Value imports - cigars and cigarillos	Value of imports of cigars and cigarillos.	UN Comtrade
3_75	Tobacco manufacturing	Value imports - other smoking tobacco products	Value of other smoking tobacco products.	UN Comtrade
3_76	Tobacco manufacturing	Value imports - smokeless tobacco products	Value of imports of smokeless tobacco products (chewing tobacco, snus, snuff, etc.).	UN Comtrade
3_77	Tobacco manufacturing	Value imports - e-cigarettes	Value of e-cigarettes (liquid and cartridge) that are imported.	
3_78	Tobacco manufacturing	Value imports - heated tobacco products	Value of heated tobacco products that are imported.	
4_79	Suppliers of the tobacco manufacturing industry	Number of companies	Number of companies that supply the value chain with paper, filters, machines and packaging. It also comprises those companies that provide transportation of tobacco and tobacco products (at each stage of the value chain).	
4_80	Suppliers of the tobacco manufacturing industry	Estimated sales revenues	Turnover, including all duties and taxes (exl. VAT), and all other charges.	Eurostat
4_81	Suppliers of the tobacco manufacturing industry	Number of employees - full time equivalent	Labor force derived from the ratio of the number of hours worked in a year by the total labor force and the standard working time of a full-time unit employed full-year.	Eurostat
4_82	Suppliers of the tobacco manufacturing industry	Number of employees - total involved	People who work for an employer and who have a contract of employment and receive compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind.	Eurostat
4_83	Suppliers of the tobacco manufacturing industry	Value added by suppliers of the tobacco industry	Value added by suppliers of the tobacco industry.	Eurostat
5_84	Tobacco distributive trade	Wholesale traders	Trade operators like distributors, wholesalers and key accounts that purchase and store the goods (among which tobacco products) in large quantities. Then, they resell them to professional users or groups (i.e. retailers), but not to final consumers.	Eurostat

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
5_85	Tobacco distributive trade	Number of employees in wholesale trade	People who work for an employer and receive compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind.	Eurostat
5_86	Tobacco distributive trade	Value added derived from tobacco distribution	Unless available from official statistics, this value is calculated from the retail value of the tobacco products, less the applicable taxes, and less the value of the manufactured tobacco products.	Eurostat
5_87	Tobacco distributive trade	Number points of sale (excluding vending machines) combustible products	Number of points of sale (excluding vending machines).	
5_88	Tobacco distributive trade	Number retail outlets - smokeless products	Number of retail outlets that sell smokeless tobacco products (chewing tobacco, snus, snuff, etc.).	KPMG
5_89	Tobacco distributive trade	Number retail outlets - e-cigarettes	Number of retail outlets that sell e-cigarettes (liquid and cartridge).	
5_90	Tobacco distributive trade	Number retail outlets - heated tobacco products	Number of retail outlets for heated tobacco products.	
5_91	Tobacco distributive trade	Number cigarette vending machines	Number of appliances that take cash in payment for packets of cigarettes.	European Tobacco Wholesalers Association (ETV)
5_92	Tobacco distributive trade	Cigarette vending machine market share	Retail volume share of cigarette vending machines.	
5_93	Tobacco distributive trade	Number of employees in combustible products retail - full time equivalent	Labor force derived from the ratio of the number of hours worked in a year by the total labor force and the standard working time of a full-time unit employed full-year.	Eurostat
5_94	Tobacco distributive trade	Number of employees in combustible products retail - total involved	People who work for an employer and receive compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind.	Eurostat
5_95	Tobacco distributive trade	Volume sales - cigarettes	Units of cigarettes sold by retailers to final consumers.	
5_96	Tobacco distributive trade	Volume sales - cigars and cigarillos	Units of cigars and cigarillos sold by retailers to final consumers.	
5_97	Tobacco distributive trade	Volume sales - other smoking tobacco products	Amount of smoking tobacco products (pipe tobacco, RYO and MYO tobacco) sold by retailers to final consumers.	
5_98	Tobacco distributive trade	Volume sales - fine cut tobacco	Amount of fine-cut tobacco sold by retailers to final consumers.	
5_99	Tobacco distributive trade	Volume sales - pipe tobacco	Amount of pipe tobacco sold by retailers to final consumers.	

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
5_100	Tobacco distributive trade	Volume sales - smokeless products	Amount of smokeless tobacco products (chewing tobacco, snus, snuff, etc.) sold by retailers to final consumers.	
5_101	Tobacco distributive trade	Volume sales - e-cigarettes	Amount of e-cigarettes (liquid and cartridge) sold to final consumers.	
5_102	Tobacco distributive trade	Volume sales - heated tobacco products	Amount of heated tobacco products sold to final consumers.	
5_103	Tobacco distributive trade	Value sales - cigarettes	Total sales of cigarettes at retail selling price (RSP), at weighted average prices in the last full reporting year.	
5_104	Tobacco distributive trade	Value sales - cigars and cigarillos	Total sales of cigars and cigarillos at retail selling price (RSP), at weighted average prices in the last full reporting year.	
5_105	Tobacco distributive trade	Value sales - other smoking tobacco products	Total sales of smoking tobacco products (pipe tobacco, RYO and MYO tobacco) at retail selling price (RSP), at weighted average prices in the last full reporting year.	
5_106	Tobacco distributive trade	Value sales - fine cut tobacco	Total sales of fine cut tobacco at retail selling price (RSP), at weighted average prices in the last full reporting year.	
5_107	Tobacco distributive trade	Value sales - pipe tobacco	Total sales of pipe tobacco at retail selling price (RSP), at weighted average prices in the last full reporting year.	
5_108	Tobacco distributive trade	Value sales - smokeless products	Total sales of smokeless tobacco products (chewing tobacco, snus, snuff, etc.) at retail selling price (RSP), at weighted average prices in the last full reporting year.	
5_109	Tobacco distributive trade	Value sales - e-cigarettes	Total sales of e-cigarettes (liquid and cartridge) at retail selling price (RSP), at weighted average prices in the last full reporting year.	
5_110	Tobacco distributive trade	Value sales - heated tobacco products	Total sales of heated tobacco products at retail selling price (RSP), at weighted average prices in the last full reporting year.	

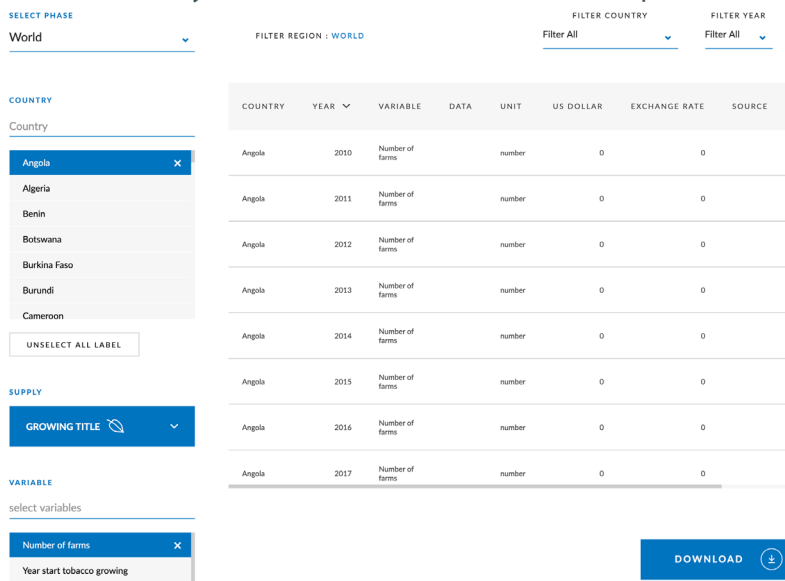
Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
6_111	Taxes	Government revenues from the excise taxes on tobacco products	Amount of money received by the national governments through the excise duty, a tax levied on specific kinds of goods, typically alcoholic beverages, sugar, tobacco and fuels. The excise on tobacco depends on both the value of the goods and on the volume or weight of tobacco (ad valorem + specific components).	WHO (p. 4)
6_112	Taxes	Government revenues from VAT (Value Added Tax)	Amount of money received by the national governments through the Value Added Tax on tobacco.	WHO (p. 11)
6_113	Taxes	Total tax per cigarette	Total tax per cigarette (standardized to a pack of 20, of the most sold brand)	WHO
6_114	Taxes	Government expenditures on tobacco control	Amount of money that was allocated and spent by national governments for tobacco control in one budget year, not what was contained in the budget. In addition to salaries, expenditures on the development of legislation, enforcement of legislation, behavior change promotion such as quit lines and cessation advice, and pharmacological treatment also constitute part of the tobacco control budget.	WHO (p. 10)
6_115	Taxes	Value import duties - unmanufactured tobacco	Customs duties levied on unmanufactured tobacco when it enters the economic territory of a nation.	WHO (p. 5)
6_116	Taxes	Value import duties - tobacco products	Customs duties levied on tobacco products when they enter the economic territory of a nation.	WHO (p. 5)
7_117	Illicit trade	Illicit trade share	Ratio between the total volume of cigarettes trade (both legal and illegal) and the volume of illicit cigarettes trade.	KPMG, Oxford Economics
7_118	Illicit trade	Illicit trade volume	Illicit trade volume refers to the number of non-duty paid cigarettes (includes smuggled & counterfeit/fake products combined). Legitimate cross-border sales are considered duty-paid. Sales arising from a foreign national purchasing cheaper cigarettes in bulk in a neighboring country for personal use and exported back are attributed to the country where the purchase is made (e.g. bulk cigarette sales by British nationals in France are attributed to France).	KPMG, Oxford Economics
7_119	Illicit trade	Tax lost due to illicit trade	Total tax revenues lost to governments due to illicit trade of cigarettes.	KPMG, Oxford Economics

Variable code	Supply chain phase	Variable Name	Definition	Reference definition source
8_120	Consumers	Number current tobacco product smokers	Number of people who smoke cigarettes, cigars, pipe or any other smoked tobacco product, both daily and non-daily or occasionally.	WHO
8_121	Consumers	Number current cigarette smokers	Number of people who smoke cigarettes, both daily and non-daily or occasionally	WHO
8_122	Consumers	Number current smokeless products users	Number of people who use smokeless tobacco products (chewing tobacco, snus, snuff, etc.), both daily and non-daily or occasionally.	WHO
8_123	Consumers	Number current e-cigarette users	Number of people who use e-cigarettes, both daily and non-daily or occasionally.	
8_124	Consumers	Number current heated tobacco products users	Number of people who use heated tobacco products, both daily and non-daily or occasionally.	
8_125	Consumers	Number daily tobacco product smokers	Number of people who smoke cigarettes, cigars, pipe or any other smoked tobacco product at least once a day.	WHO, OECD
8_126	Consumers	Number daily cigarette smokers	Number of people who smoke cigarettes at least once a day.	WHO, OECD
8_127	Consumers	Average daily cigarette consumption	Average daily cigarette consumption.	OECD
8_128	Consumers	Average retail price - cigarettes	Average retail price cigarette (in local currency, standardized to a pack of 20, of the most sold brand).	WHO (p. 11)
8_129	Consumers	Average retail price - e-cigarettes	Average retail price for e-cigarettes (liquid and cartridge).	
8_130	Consumers	Average retail price - heated tobacco products	Average retail price for heated tobacco products.	
8_131	Consumers	Average retail price - smokeless products	Average retail price smokeless tobacco products (chewing tobacco, snus, snuff, etc.).	
8_132	Consumers	Cheapest price of cigarettes (in legal realm)	Retail price (inclusive of all taxes and in local currency where available) of a pack of 20 cigarettes purchased at a convenience store or supermarket in the capital city.	WHO

Online Tool and Data File Output

What is the database online tool?

The visualization tool launched on pmi.com with the 3rd release allows you to interact with the Database in a user-friendly way. You can start by filtering the database by region, country, supply chain phase and variable. The selection is then displayed as a table, graph or map, where you can choose one or more years. You can then download the output in the chosen format.



How is the database output set up?

The database output can be viewed in an excel spreadsheet containing the following columns:

- Continent code
- Continent name
- Region code
- Region name
- Country code
- Country name
- Data collection year
- Supply chain phase code
- Supply chain phase name
- Variable number
- Variable name
- Measurement unit
- Variable
- Data
- Data in USD
- Year
- Source
- Link
- Exchange rate (USD/lc)
- Notes

N.B. The column "Year" shows the year of the time-series when the value in "Data" was recorded. The only exception is the variable "1_1_Year start tobacco growing", for which there is no time-series, as its name says, and thus, the column "Year" is left empty.

What kind of filters are available?

Each column can be sorted by clicking on the small downwards arrows in the bottom right corner of the column title. As an example, instead of visualizing the whole database, you could select five variables for three countries in one specific year.

Country_name	Data_collection_ye	Supply chain phase_code	Supply chain phase_name	Variable_num
Italy	2019	5	Distributive trade	102
Italy	2019	5	Distributive trade	103
Italy	2019	5	Distributive trade	103
Italy	2019	5	Distributive trade	103
Italy	2019	5	Distributive trade	103
Italy	2019	5	Distributive trade	103
Italy	2019	5	Distributive trade	103
Italy	2019	5	Distributive trade	103

Abbreviations and Terminology

List of abbreviations in alphabetical order

Term	Description	Website
BAT	British American Tobacco	http://www.bat.com/
EC	European Commission	http://ec.europa.eu/index_en.htm
EPS	Empty Pack Survey	
FAO	Food and Agriculture Organization of the United Nations	http://www.fao.org/home/en/
FTE	Full-time equivalent	
FVC	Flue Cured Virginia tobacco	
Ha	Hectare	
HNB	Heat-not-burn	https://www.pmiscience.com/smoke-free
IB	Imperial Brands	https://www.imperialbrandsplc.com/index.html
IT	Illicit Trade	
JTI	Japan Tobacco International	http://www.jti.com/
LAC	Light Air Cured Burley tobacco	
LAS	Legal-aged smokers	
LC	Local currency	
MoF	Ministry of Finance	
MoH	Ministry of Health	
MYO	Make-your-own tobacco	
NOMISMA	An economic research company based in Bologna, Italy	http://www.nomisma.it/index.php/en/
OECD	Organisation for Economic Cooperation and Development	http://www.oecd.org/
PMI	Philip Morris International Inc.	http://www.pmi.com/eng/pages/homepage.aspx
POS	Point of sale	
PWC	PriceWaterhouseCoopers	https://www.pwc.com/
RSP	Retail Selling Pricing	
RYO	Roll-your-own tobacco	
TARIC	Integrated Tariff of the European Union database	https://ec.europa.eu/taxation_customs/business/calculation-customs-duties/what-is-common-customs-tariff/taric_en
UN	United Nations	http://www.un.org/en/index.html
VAT	Value-added tax	
WHO	World Health Organization	http://www.who.int/en/
WTO	World Trade Organization	https://www.wto.org/index.htm

Geographical Coverage

What are the various regional and sub-regional codes?

The data available can be broken down by region, sub-region and continent. The codes are the UN codes.

Please refer to the following codes for sub-regional breakdowns:

Region / Sub-region	Codes
AFRICA	2
Eastern Africa	14
Middle Africa	17
Northern Africa	15
Southern Africa	18
Western Africa	11
ASIA	142
Central Asia	143
Eastern Asia	30
Southern Asia	34
South-Eastern Asia	35
Western Asia	145
OCEANIA	9
Australia and New Zealand	53
Melanesia	54
Micronesia	57
Polynesia	61
AMERICAS	19
Latin America	419
Caribbean	29
Central America	13
South America	5
Northern America	21
EUROPE	150
Eastern Europe	151
Northern Europe	154
Southern Europe	39
Western Europe	155

Which countries are included in the database?

You can find below the list of countries included in the database, as well as their country codes (based on UN codes), by alphabetical order.

	Country	Code		Country	Code
1	Afghanistan	4	42	Costa Rica	188
2	Albania	8	43	Côte d'Ivoire	384
3	Algeria	12	44	Croatia	191
4	Andorra	20	45	Cuba	192
5	Angola	24	46	Cyprus	196
6	Antigua and Barbuda	28	47	Czech Republic	203
7	Argentina	32	48	Denmark	208
8	Armenia	51	49	Djibouti	262
9	Australia	36	50	Dominica	212
10	Austria	40	51	Dominican Republic	214
11	Azerbaijan	31	52	Ecuador	218
12	Bahamas	44	53	Egypt	818
13	Bahrain	48	54	El Salvador	222
14	Bangladesh	50	55	Equatorial Guinea	226
15	Barbados	52	56	Eritrea	232
16	Belarus	112	57	Estonia	233
17	Belgium	56	58	Eswatini	748
18	Belize	84	59	Ethiopia	231
19	Benin	204	60	Fiji	242
20	Bhutan	64	61	Finland	246
21	Bolivia	68	62	France	250
22	Bosnia and Herzegovina	70	63	Gabon	266
23	Botswana	72	64	Gambia	270
24	Brazil	76	65	Georgia	268
25	Brunei Darussalam	96	66	Germany	276
26	Bulgaria	100	67	Ghana	288
27	Burkina Faso	854	68	Greece	300
28	Burundi	108	69	Grenada	308
29	Cambodia	116	70	Guatemala	320
30	Cameroon	120	71	Guinea	324
31	Canada	124	72	Guinea-Bissau	624
32	Cape Verde	132	73	Guyana	328
33	Central African Republic	140	74	Haiti	332
34	Chad	148	75	Honduras	340
35	Chile	152	76	Hungary	348
36	China	156	77	Iceland	352
37	Colombia	170	78	India	356
38	Comoros	174	79	Indonesia	360
39	Congo	178	80	Iraq	368
40	Congo, Democratic Republic of the	180	81	Ireland	372
41	Cook Islands	184	82	Israel	376

	Country	Code		Country	Code
83	Italy	380	129	Oman	512
84	Jamaica	388	130	Pakistan	586
85	Japan	392	131	Palau	585
86	Jordan	400	132	Palestine	275
87	Kazakhstan	398	133	Panama	591
88	Kenya	404	134	Papua New Guinea	598
89	Kiribati	296	135	Paraguay	600
90	Kuwait	414	136	Peru	604
91	Kyrgyzstan	417	137	Philippines	608
92	Laos	418	138	Poland	616
93	Latvia	428	139	Portugal	620
94	Lebanon	422	140	Qatar	634
95	Lesotho	426	141	Romania	642
96	Liberia	430	142	Russia	643
97	Libya	434	143	Rwanda	646
98	Lithuania	440	144	Saint Kitts and Nevis	659
99	Luxembourg	442	145	Saint Lucia	662
100	Madagascar	450	146	Saint Vincent and the Grenadines	670
101	Malawi	454	147	Samoa	882
102	Malaysia	458	148	San Marino	674
103	Maldives	462	149	Sao Tome and Principe	678
104	Mali	466	150	Saudi Arabia	682
105	Malta	470	151	Senegal	686
106	Marshall Islands	584	152	Serbia	688
107	Mauritania	478	153	Seychelles	690
108	Mauritius	480	154	Sierra Leone	694
109	Mexico	484	155	Singapore	702
110	Micronesia	583	156	Slovakia	703
111	Moldova	498	157	Slovenia	705
112	Monaco	492	158	Solomon Islands	90
113	Mongolia	496	159	Somalia	706
114	Montenegro	499	160	South Africa	710
115	Morocco	504	161	South Korea	410
116	Mozambique	508	162	Spain	724
117	Myanmar	104	163	Sri Lanka	144
118	Namibia	516	164	Sudan	729
119	Nauru	520	165	Suriname	740
120	Nepal	524	166	Sweden	752
121	Netherlands	528	167	Switzerland	756
122	New Zealand	554	168	Tajikistan	762
123	Nicaragua	558	169	Tanzania	834
124	Niger	562	170	Thailand	764
125	Nigeria	566	171	Timor-Leste	626
126	Niue	570	172	Togo	768
127	North Macedonia	807	173	Tonga	776
128	Norway	578	174	Trinidad and Tobago	780

	Country	Code
175	Tunisia	788
176	Turkey	792
177	Turkmenistan	795
178	Tuvalu	798
179	Uganda	800
180	Ukraine	804
181	United Arab Emirates	784
182	United Kingdom	826
183	United States of America	840
184	Uruguay	858
185	Uzbekistan	860
186	Vanuatu	548
187	Venezuela	862
188	Viet Nam	704
189	Yemen	887
190	Zambia	894
191	Zimbabwe	716

