

Presentation



Production of Composite Gas Cylinders (Type 4)



Composite Cylinders Advanced
cylinders.io

Gas cylinders existing in the market are subdivided into 4 types depending on the materials used, CCA offers polymer composite cylinders of type 4

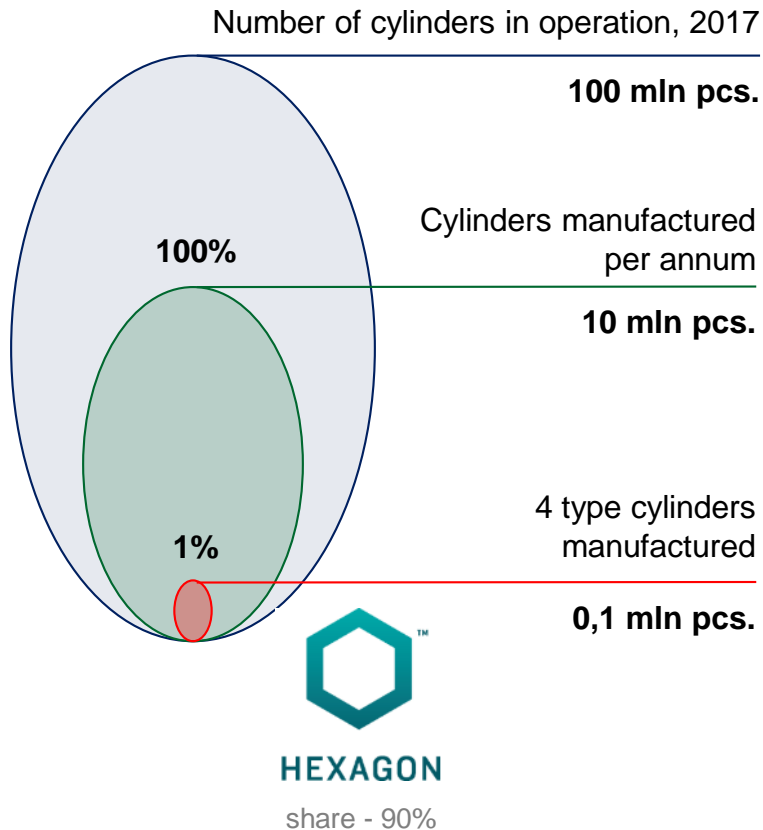
		Main types of gas cylinders			
Key specific characteristics		Type 1	Type 2	Type 3	Type 4
	Liner		Steel	Metal	
Shell		All metal cylinders	Cylinder based PCM ¹ shell	Shell of PCM along the whole surface	Shell of PCM along the whole surface



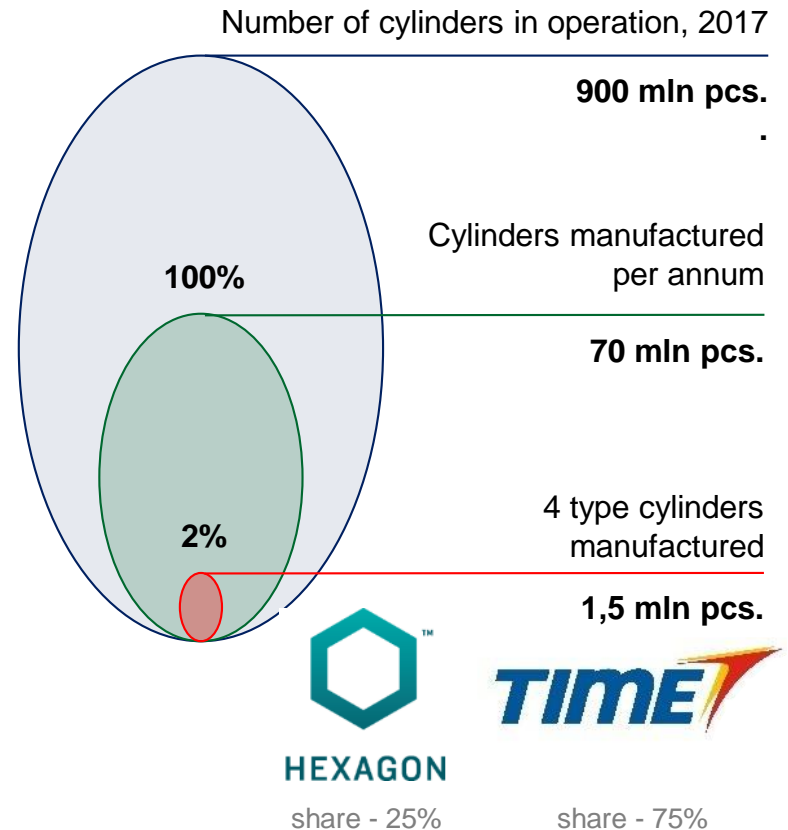
¹ – polymer composite materials

The world market of type 4 composite cylinders for CNG and LPG is monopolized and has a big potential in the area of metal cylinders replacement

World market of CNG cylinders



World market of LPG cylinders

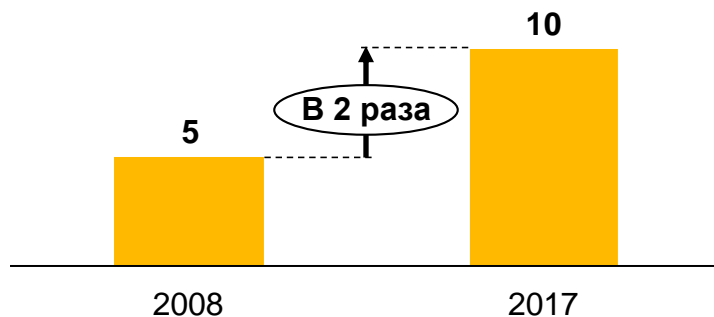


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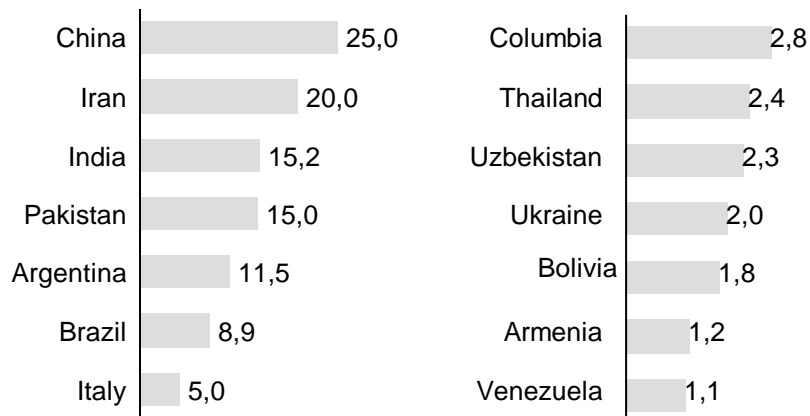
Over the last 10 years CNG cylinders production doubled whereas LPG cylinders production stays at a consistent high level

Over the last 10 years CNG cylinders production doubled

Dynamics of CNG cylinders production, mln pcs.

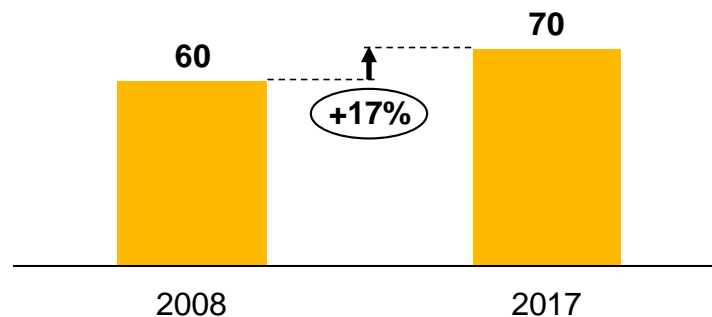


Number of CNG cylinders in circulation in 2017, mln pcs.

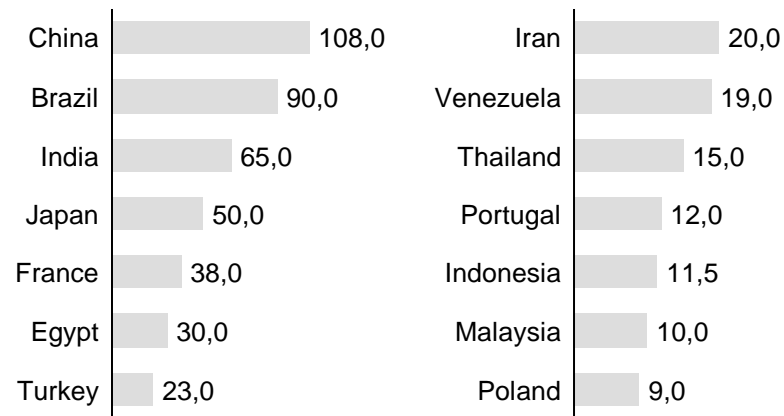


Over the last 10 years LPG cylinders production increased slightly

Dynamics of LPG cylinders production, mln pcs.



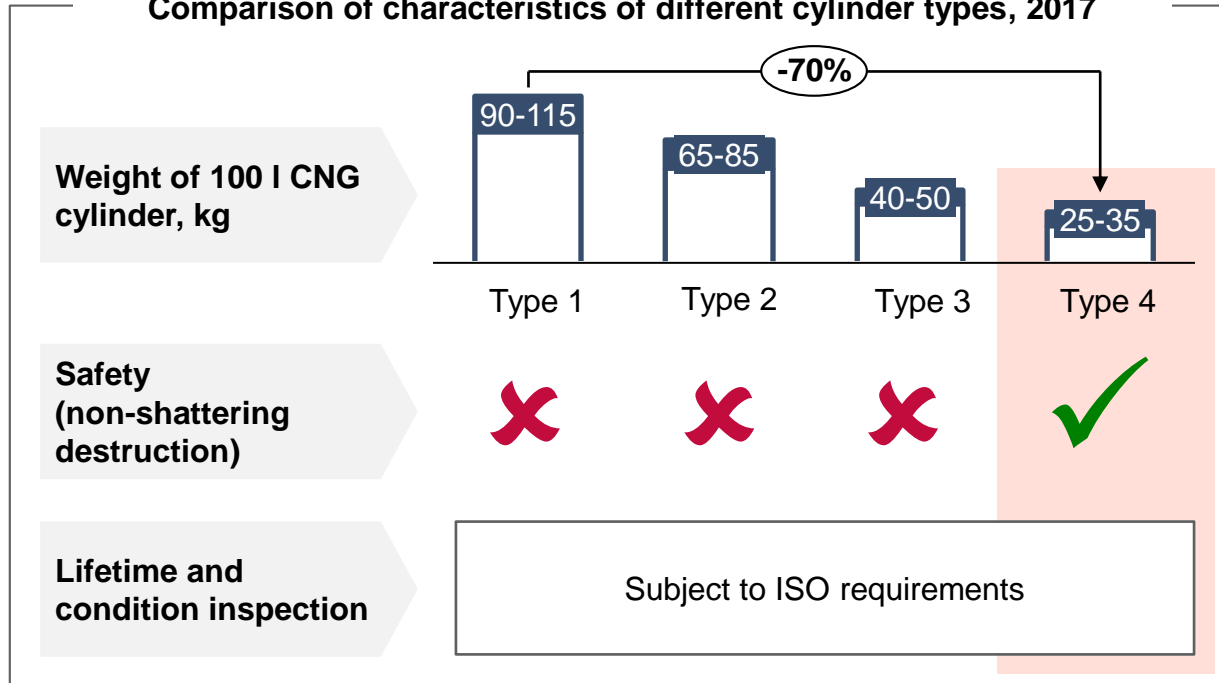
Number of LPG cylinders in circulation in 2017, mln pcs.



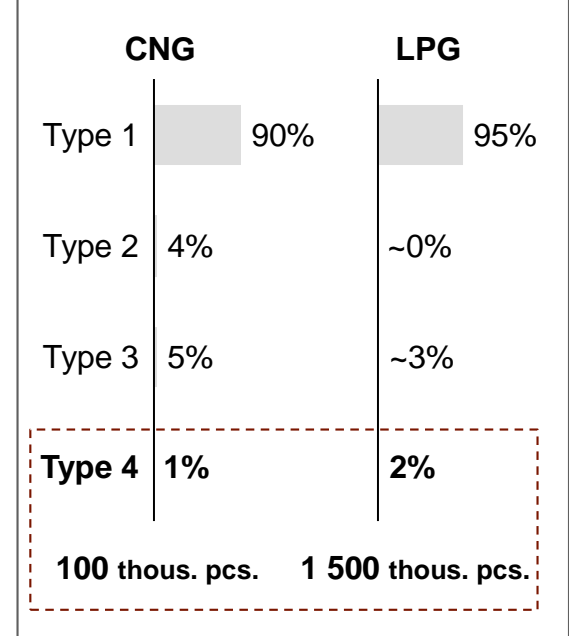
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Type 4 cylinders are lighter, easier in use and safer than analogues, furthermore one can see great potential of these cylinders share increase in the market

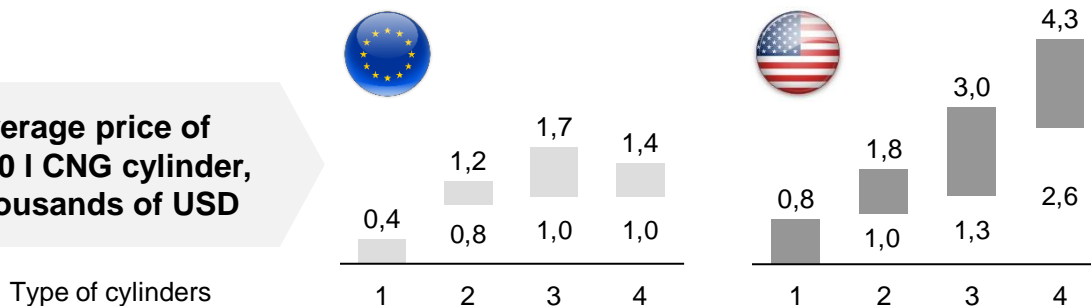
Comparison of characteristics of different cylinder types, 2017



Structure of cylinders production in the world, 2017



Average price of 100 l CNG cylinder, thousands of USD

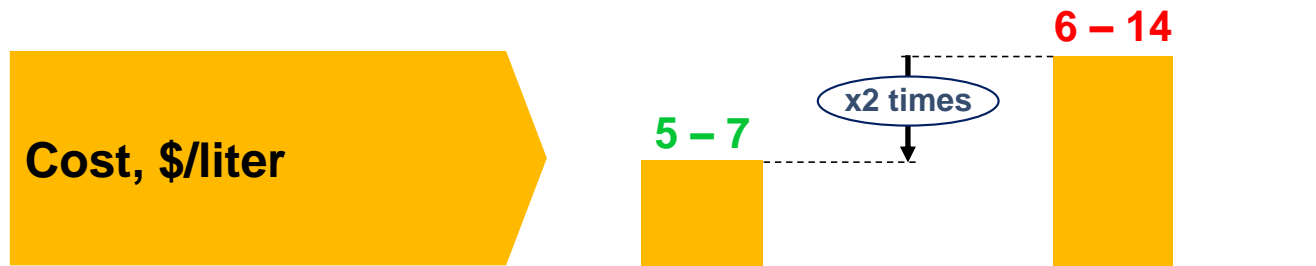


Higher price for CNG cylinders in the US market is explained by Stricter technical requirements for high pressure cylinders set forward by DOT which radically increases cost of their production

CCA cylinders have a lower cost and superior quality in comparison with most analogues

Using the example of 100 l CNG cylinder

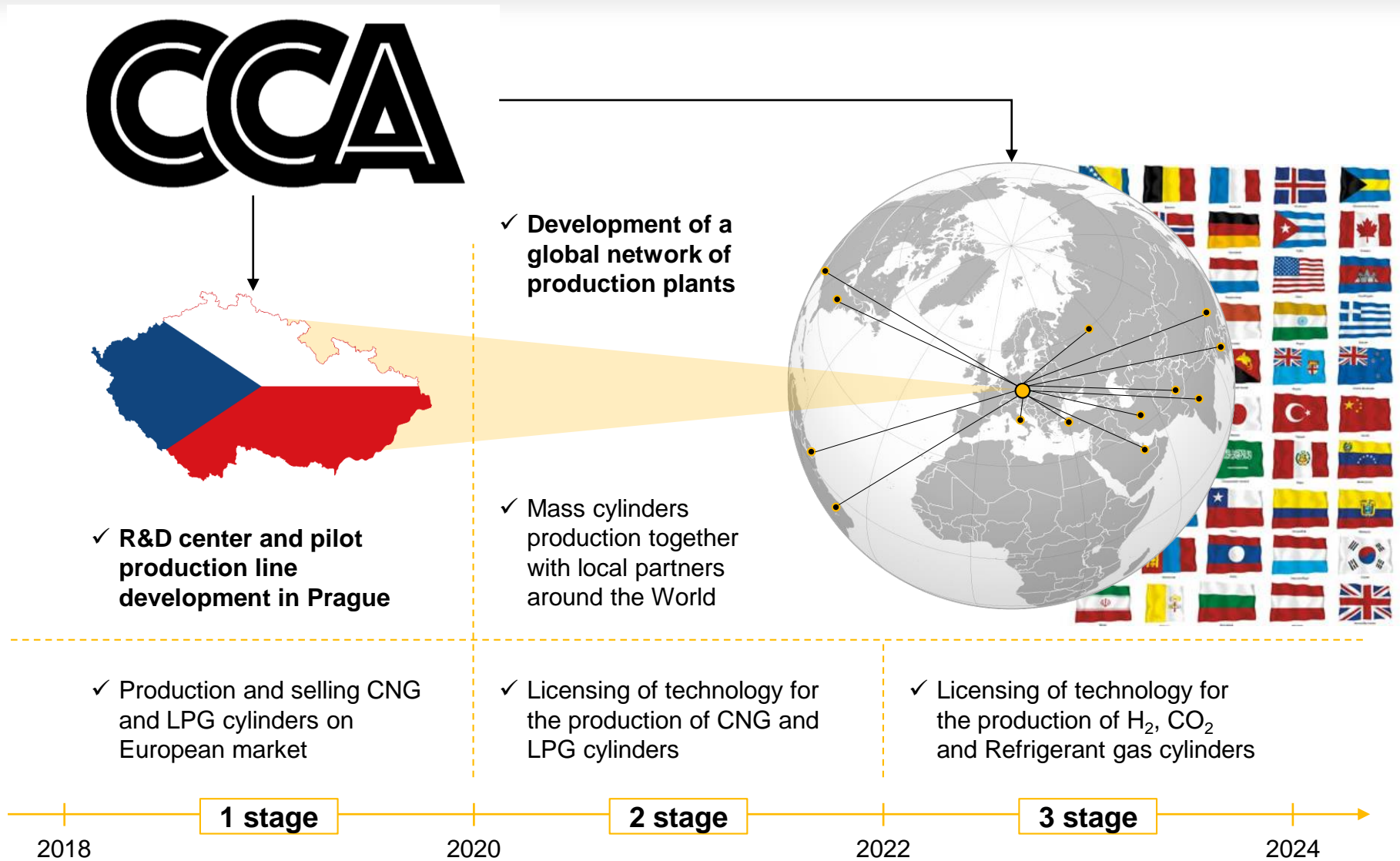
Technical parameters	CCA		Analogue	Comments
Liner production speed, min	5 – 10	-75%	30 – 40	✓ A new polymer type is used whose properties and processing methods are superior to traditional polymers
Weight / volume, kg/l	0,3 – 0,35	-15%	0,35 – 0,4	✓ Own unique liner making equipment is designed
Maximum temperature, °C	+120 °C	+85%	+65 °C	✓ Cylinders will comply with ISO 11119-3:2013
Gas permeability, ml / hour	0,25	✓	n/a	✓ Own wrapping yarn impregnating unit and unique impregnation agent composition have been designed which will make it possible to reduce impregnation and drying time
Wrapping speed, min	30	-30%	45	



Gross revenue increase and opportunity of entry into new CNG cylinders markets because of replacement metal cylinders on composite ones

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The CCA business model includes 3 stages from the production of CNG and LPG cylinders in Europe to the development of a global network of production plants




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Investments in CCA project is about 5 mln USD. Financing is supposed by selling own cryptocurrency on amount of 80 mln tokens CCA within the framework of ICO

Pre-ICO

Discount from the Pre-ICO base price	50%	35%	15%	0%	
					\$ 665k
Cost per 1 CCA	0,025 \$	0,0325 \$	0,0425 \$	0,05 \$	
Volume of CCA for sale	8 000 000	6 000 000	4 000 000	2 000 000	20 mln CCA

ICO

Discount from the ICO base price	20%	15%	10%	5%	0%	
						\$ 4 335k
Cost per 1 CCA	0,025 \$	0,0325 \$	0,0425 \$	0,05 \$	0,075 \$	
Volume of CCA for sale	2 500 000	5 000 000	7 500 000	10 000 000	35 000 000	60 mln CCA

Token Holders have 3 exit strategies: convert tokens to shares of production plants, purchase of composite cylinders and buy-back tokens at a smart contract

ICO Participants / Token Holders



Purchase tokens on ICO
Pre-Sale: 1 CCA = \$0.05
Sale: 1 CCA = \$0.075



Conversion tokens
into shares
1 CCA = \$0.5



Buying cylinders for
tokens
1 CCA = \$0.2

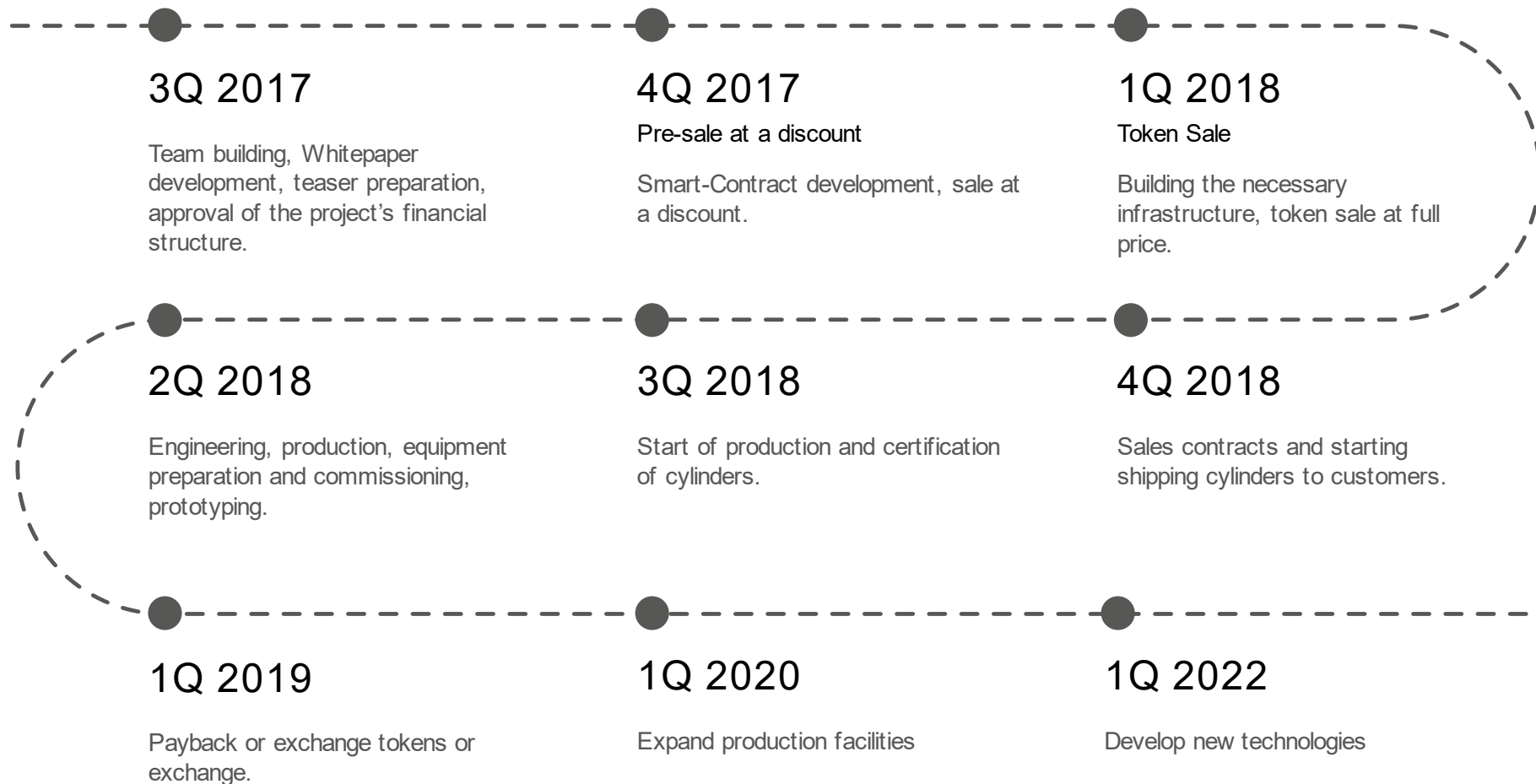


Buyback tokens on
the smart contract
~ 30% of revenue



Development of CNG cylinder prototype, its certification and production startup will take about 12 months

Project Timeline



Joint experience of the team is more than 200 years. The team members have experience of development of type 4 composite cylinders own production process

Project team



**Khanif Magsumovich
Makhyanov**

Chairman of Board of Directors

Experience 40 years

Setting up of composite cylinders
production plant



**Nikolai Alexandrovich
Leontyev**

Chief of Production

Experience 15 years

Development of new design-
engineering solutions in the field
of composite materials



Victor Fedorovich Goriachev
Chief Designer

Experience 30 years

Development and production of
scientific solutions



**Timur Robertovich
Akhiyarov**

General Director

Experience 12 years

Strategic management,
investment and finance



**Alexander Borisovich
Leontyev**

Chief Process Engineer

Experience 40 years

Development of flexible
production systems



Ainur Bulatovich Motigullin
Engineer

Experience 3 years

Technical analysis



John Phillip Noiman, Jr.
President of JNS Enterprises Inc
(USA)

Experience 45 years

Production and sales of cylinders,
accessories and natural gas
motor fuel storage tanks



Vladimir Sergeyevich Smirnov
Laureate of the Lenin Prize

Experience 60 years

General Director of NPO
"Khimvolokno", Deputy Minister of
Chemical Industry of the USSR



Franco Treppo
Production engineering

Experience 30 years

Conception, upgrading and
efficiency covering of the
production processes



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Our team is always ready to answer your questions