

Invest in AUTOMOTIVE in Emilia-Romagna

The **automotive cluster** has made Emilia-Romagna world famous and also known as the "Motor Valley". Alongside the renowned brands from the region which have achieved the highest accolades internationally on a sporting level, the highest levels when it comes to quality and luxury, there is also a widespread system of suppliers who are capable of creating great synergies and collaboration amongst themselves.

Starting with a strong cultural tradition and investment in innovation, we have developed an outstanding, highly productive and profitable cluster which stems from the even more widely diffused mechanical cluster in our region.



LEADING FACTORS

- The cluster presents export figures of 15.6 billion Euros in 2008, which amounts to 19.6% of national exports of automotives and 33% of exports from the region.
- The agricultural machinery exports sector in our region accounts for 30.2% of total national export figures.
- Internationally leading car and motorcycle brands (such as Ferrari and Ducati) which have accomplished outstanding results and obtained top recognition on the International GP circuit.
- High added value and an excellent diversity of products.
- Specialized suppliers spread all over the region.

Invest in excellence and innovation

Automotive companies from our region specialize in high quality production, with a high added value and a greatly diversified range of products. They do not operate from large-sized factories, however, what really distinguishes them is their distinctive research, accomplished by second to none R&D, supported by the network of laboratories in the region, and the availability of specialist skills. Even though the most famous internationally known and sold brands are the ones that manufacture cars and motorcycles, the region is also a leader in the agricultural machinery sector. Companies that supply components make up more than half the local businesses and employ almost 80% of those working in the cluster. These companies may be medium-sized but they represent the widespread entrepreneurial structure which provides a support network for excellence and fertile terrain for new investment.

The cluster on an international level

The cluster produces one third of exports from the region, to a total value of 15.6 billion Euros, and is hence very oriented towards the international markets, Europe in particular. The sectors not connected to the individual types of vehicles (defined below as cross-sectors) and the sectors connected to cars also contribute significantly to export figures. However, agricultural machinery and motorcycles, although produced for a more precise market also show a substantial penetration into foreign markets.

Invest in local specialization

The "Motor Valley" is mainly based in the provinces of Modena, Bologna and Reggio Emilia. If, however, we take into account the sectors of all the cross-sectors, which employ more than half the number working in the cluster, we can see that they are evenly spread all over the region. In addition, there are municipalities which specialize in individual sectors in all the provinces of the region.

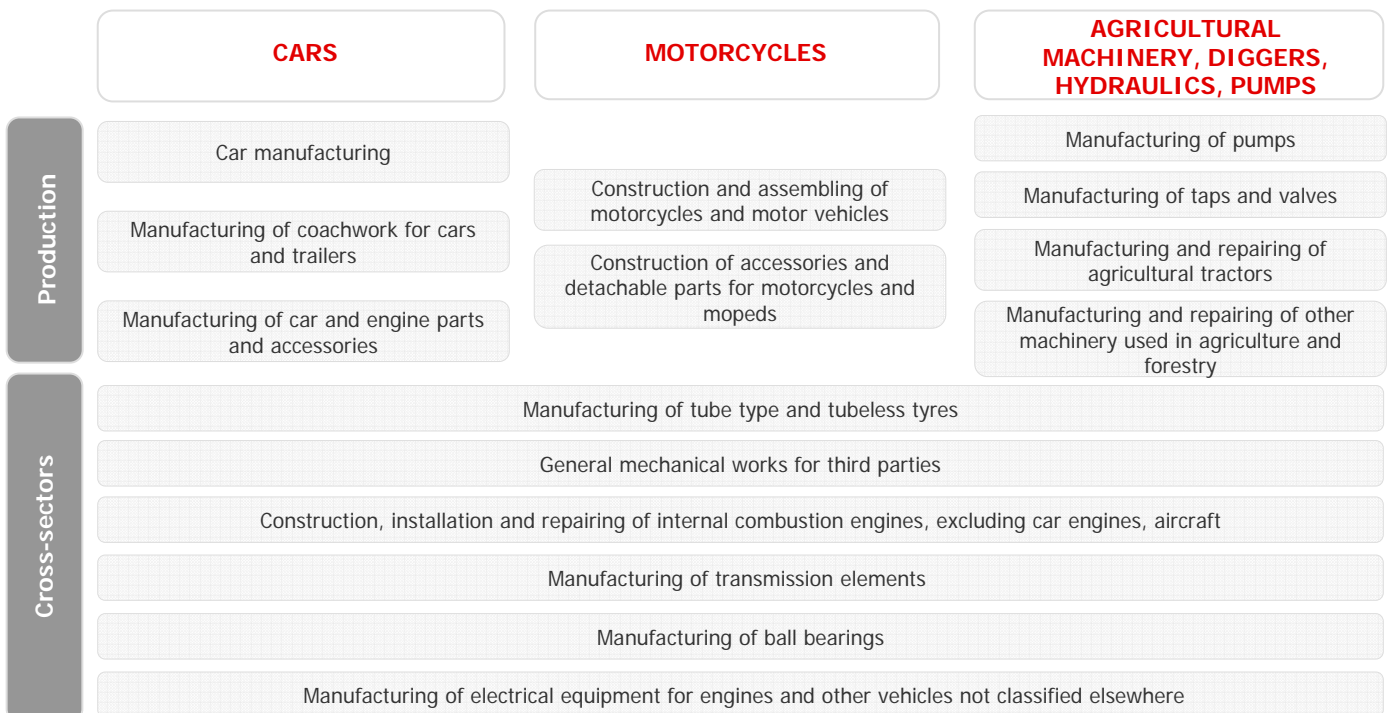
SOME COMPANIES FROM THE REGION





The automotive cluster: its structure and its sectors

The **automotive cluster** is divided into three main sub-clusters, **cars**, **motorcycles** and a third one which is made up of **agricultural machinery, diggers, hydraulics and pumps**. In addition to these sub-clusters there are the **cross-sectors** which mainly work on the manufacture of components for the automotive industry.



Companies and number employed

The automotive cluster– Local businesses and number employed: absolute values and quotas of the totals in the regional cluster
 Source: Asia, 2006

Sub-Clusters	Macrosectors	Local businesses	% Quota of local businesses in the cluster	Number employed	% Quota of number employed in the cluster
CARS	Car manufacturing	33	0.4%	7,094.4	8.3%
	Manufacturing of coachwork, parts and accessories for cars and their engines; trailers	310	4.2%	8,596.9	10.1%
		343	4.7%	15,691.3	18.9%
MOTORCYCLES	Construction and assembling of motorcycles and motor vehicles	37	0.5%	1,459.6	1.7%
	Construction of accessories and detachable parts for motorcycles and mopeds	63	0.9%	1132.9	1.3%
		100	1.4%	2,592.5	3.1%
AGRICULTURAL MACHINERY, DIGGERS, HYDRAULICS, PUMPS	Manufacturing of pumps	243	3.3%	6985.7	8.2%
	Manufacturing of taps and valves	67	0.9%	2395.1	2.8%
	Manufacturing of agricultural tractors and other machinery used in agriculture and forestry	435	5.9%	9783.4	11.5%
	Repairing of agricultural tractors and other machinery used in agriculture and forestry	396	5.4%	1078.9	1.3%
		1,141	14.7%	20,243.1	21.5%
CROSS-SECTORS	General mechanical works for third parties	5,413	73.6%	35,684.7	41.8%
	Manufacturing of transmission elements	196	2.7%	8,314.8	9.7%
	Other cross-sectors (Construction and installation of: internal combustion engines, excluding car engines, aircraft; turbines, machinery for mechanical energy production. Manufacturing of: tube type and tubeless tyres, ball bearings, electrical equipment for engines and vehicles)	157	2.1%	2,788.5	3.3%
			5,766	79.2%	46,788
TOTAL		7,350 companies		85,315 employed	

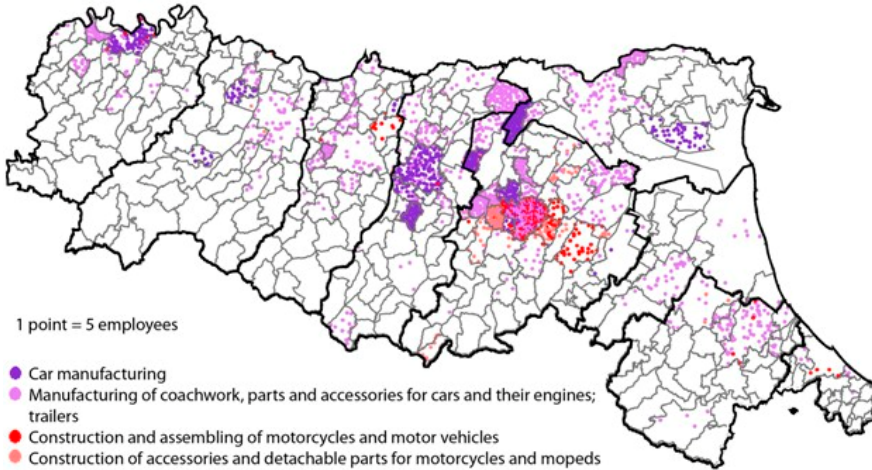


The regional automotive cluster

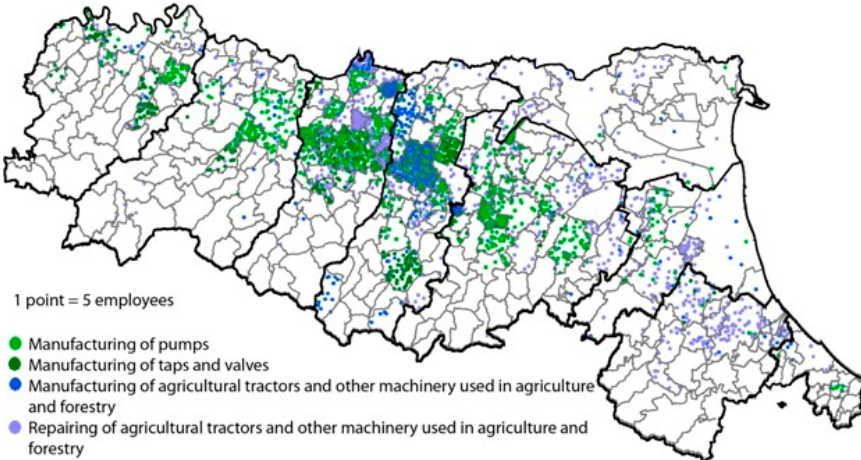
Source: Asia Databank 2006

The automotive cluster is mainly concentrated in the provinces of Modena, Bologna and Reggio Emilia but also spreads to all the other provinces, particularly in the case of the cross-sectors.

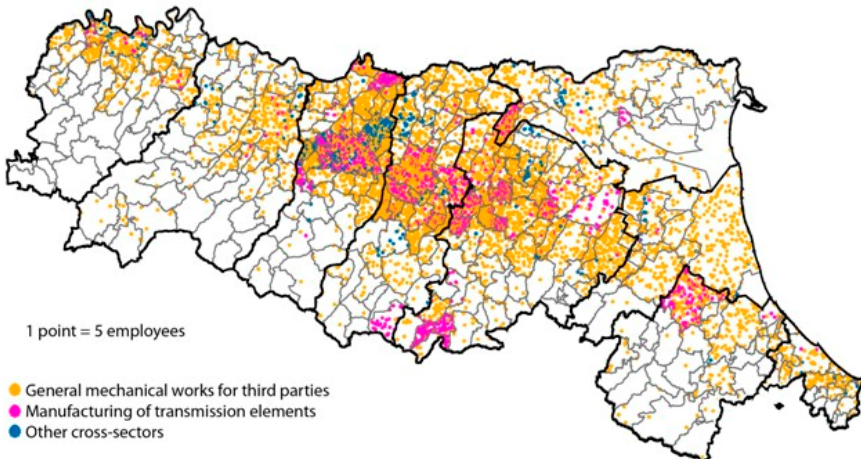
Automotive cluster. Number employed in the manufacturing of Cars and Motorcycles - 2006



Automotive cluster. Number employed in Agricultural machinery and Pumps, Taps and Valves sectors - 2006



Automotive cluster. Number employed in the Cross-sectors - 2006



Areas with the highest concentration of numbers employed

The **car manufacturing** sector is concentrated in the province of **Modena** (Maranello is the municipality with the highest number employed, followed by Modena and Formigine). There is also a sizeable concentration in the municipality of **Cento** (FE), in the **Bolognese** area (S.Agata, Calderara, Bologna) as well as in the municipality of Piacenza. The **manufacturing of parts and accessories** is largely situated in the province of **Bologna** (Bologna, Crespellano, Molinella, Argelato) followed by Modena (Finale Emilia in particular).

The **motorcycle and related accessory manufacturing** is also concentrated around the province of **Bologna** (municipalities of Bologna, Castel S.Pietro, San Lazzaro, Castenaso).

The **manufacturing and repairing of agricultural machinery** has a high concentration of number employed mainly in the provinces of **Reggio Emilia** (Fabbrico, Bagnolo, Reggio Emilia) and **Modena** (Savignano, Finale Emilia), followed by Ravenna and Forlì-Cesena.

The **manufacturing of taps and valves** is concentrated in the provinces of **Reggio Emilia** (Reggio Emilia, S. Ilario, Correggio), **Bologna** (Zola Predosa, Castel S.Pietro, Sasso Marconi) and **Modena** (which is the municipality with the highest concentration of number employed). There are significant concentrations in Parma and Piacenza as well.

The sector connected to **general mechanical works for third parties** is the one that actually has the highest numbers employed in the cluster. As the map alongside shows, the sector is widespread all over the region.

The **manufacturing of transmission elements** is concentrated in the provinces of **Reggio Emilia** (a high concentration in the municipality of Reggio, followed by Reggiolo and Cavriago), **Bologna** (in particular Calderara, followed by Porretta, Castel di Casio, Casalecchio, Monteveglio), **Modena** (Modena, Formigine Castelfranco) and in the municipality of Forlì.



The automotive cluster on an international level

Exports

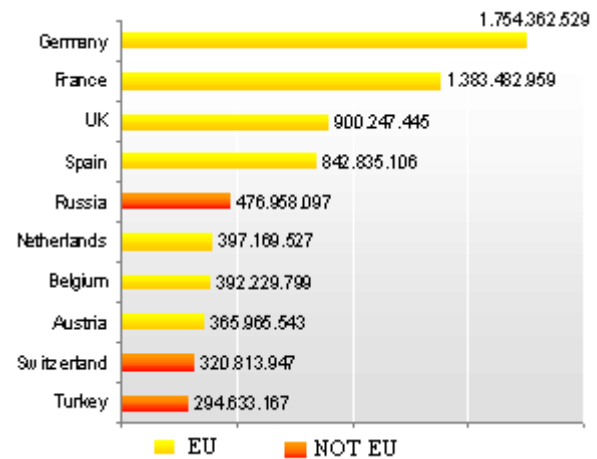
Source: Istat Coeweb Databank

In 2008 exports from the automotive cluster in our region amounted to around 15.6 billion Euros, 19.6% of the national total. The different automotive sectors put together represent 33.0% of total exports from Emilia-Romagna.

Where we export to

We mainly export to Europe. Germany and France are the two countries we export to the most. Exports to North America are predominantly to the USA while those to the Far East are mainly to China and Japan.

The main European countries we export to - 2008 (data in Euros)



Percentage of total exports per destination – 2008

EU 27	North America	Other European countries	Far East	Middle East
51.5%	12.1%	9.2%	7.9%	5.9%
Central and South America	North Africa	Central Asia	Australasia and other territories	Other African countries
4.1%	2.8%	2.5%	2.1%	2.0%

Sectors and export trends

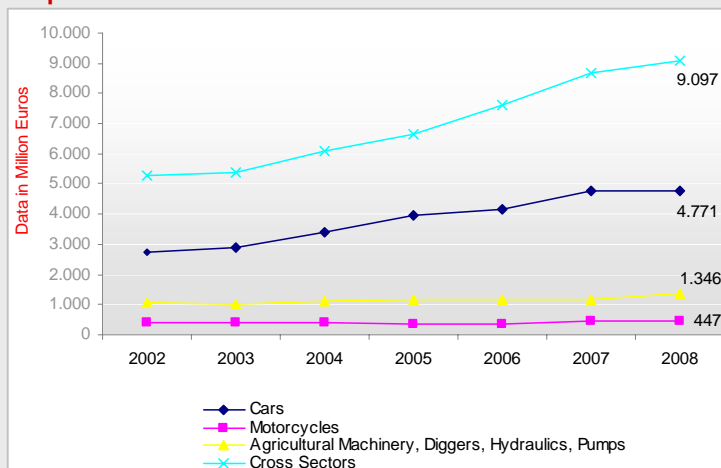
In 2008 exports show a positive trend both considering the cluster as a whole and when analysing the individual sub-clusters, with the exception of the MOTOCYCLES sector, in decline between 2004 and 2006 but with a clear recovery in the following two years.

Regarding vehicle production CARS account for highest export figures (30.5% of exports in 2008) but the CROSS-SECTORS make up more than half the exports from the cluster (58.1% in 2008) with a particularly high contribution coming from the "other machinery for general use" sector.

The AGRICULTURAL MACHINERY sector produced growth figures of 31% (2004-08) which do not appear in the table as they were offset by the "Valves and electronic vacuum tubes and other electronic components", which this sector is combined with and shows a decline – 13.7%.

The sectors with the highest growth trend are "Engines, generators and electrical transformers" and "Machinery and equipment for the production and use of mechanical energy, excluding aircraft, vehicle and motorcycle engines" with respective growth figures of 82.8% and 71.3% (2004-2008).

Export trends of the main sectors in the automotive cluster



Export trends AUTOMOTIVE CLUSTER

2004-2006	21.4%
2006-2008	17.7%
2004-2008	42.9%

Sub-cluster export trends CAR

2004-2006	21.6%
2006-2008	14.9%
2004-2008	39.8%

Sub-cluster export trends MOTORCYCLES

2004-2006	- 5.6%
2006-2008	22.9%
2004-2008	15.9%

Sub-cluster export trends AGRICULTURAL MACHINERY, DIGGERS, HYDRAULICS & PUMPS

2004-2006	7.1%
2006-2008	14.9%
2004-2008	23.1%

Export trends CROSS-SECTORS

2004-2006	25.6%
2006-2008	19.4%
2004-2008	50.0%



The automotive cluster on an international level

International Trade Fairs

	MOTORSHOW www.motorshow.it	International Automobile Salon held at the Bologna trade fair site. A leading and cutting edge internationally acclaimed and renowned event in this sector. The 2009 edition received 460,158 visitors.
	AUTOPROMOTEC www.autopromotec.it	International Biennial Exhibition of Automotive Equipment and Aftermarket Products held at the Bologna trade fair site. The 2009 edition received 101,620 visitors (16.4% from abroad) and hosted 1,443 exhibitors (32.4% from abroad).
	MY SPECIAL CAR SHOW www.myspecialcar.it	The Special and Sports Car Exhibition held at the Rimini trade fair site. Over 200 clubs took part in 2010 on an exhibition space of over 53.000 m2.
	EIMA INTERNATIONAL www.eima.it	International Showcase of Agricultural Machinery held at the Bologna trade fair site. It hosted 1,635 exhibitors (36.3% from abroad) and received over 140,000 visitors in 2008.
	MOTOR SPORT EXPOTECH www.motorsportexpotech.it	International Exhibition and Conference for Innovative Materials, Technologies, Products and Services for the Motor Sport Industry held at the Modena trade fair site. Over 7,000 professional visitors - employed in the sector attended the event in 2009.
	IL SALONE DEL CAMPER www.fiereparma.it	Salon for Campers, Caravans, Accessories, Routes and Destinations held at the Parma trade fair site. An event which has been newly introduced and is held on a exhibition space of 100,000 m2.
	AUTO E MOTO DEL PASSATO www.pellegriniclassicsoolutions.com	Exhibition and market of spare parts for vintage cars and motorbikes plus an exhibition of classic cars held at the Ferrara trade fair site. An exhibition space of 5,600 m2 with 185 exhibitors and 10,125 visitors.

Top investors

Some important foreign investors in the automotive industry in Emilia-Romagna.

Company	Investor	Country of Origin	Type of business
ARVIN REPLACEMENT PRODUCTS SRL	ARVINMERITOR INC.	United States	Silencers for motor vehicles
O.M.T. OFFICINA MECCANICA TARTARINI SPA	EMERSON ELECTRIC CO.	United States	Complete terminals for regulating and measuring natural gas, pressure regulators, blocking and safety valves
ROSSI MOTORIDUTTORI SPA	HABASIT HOLDING AG	Switzerland	Gearboxes, gear reducers and gear motors
C.I.A.P. - COSTRUZIONE ITALIANA APP. DI PRECISIONE SPA	HONDA MOTOR LTD	Japan	Two-stroke engines for motorcycles
MOTORI MINARELLI SRL	YAMAHA MOTOR CO. LTD	Japan	Two-stroke engines for motorcycles
COMATROL SRL	SAUER DANFOSS INC.	United States	Components and equipment for the automation of mechanical, electrical, electronic and hydraulic controls
KVERNELAND GROUP MODENA SPA	KVERNELAND ASA	Norway	Agricultural machinery
MEC-TRACK SRL	CATERPILLAR INC.	United States	Parts for tractors and agricultural machinery
PAIOLI MECCANICA SPA	YAMAHA MOTOR CO. LTD	Japan	Front forks for all types of motorcycles and scooters
SALMSON ITALIA SRL	POMPES SALMSON SA	France	Pumps
TITAN ITALIA SPA	TITAN EUROPE PLC	Great Britain	Wheel rims, idlers and brakes



Facilities available automotive businesses in Emilia-Romagna

Research and innovation

Advanced Technology Laboratory Network

ASTER – <http://htn.aster.it>

Laboratories

AERTECH-LAB - Automation, Electronics and Bioengineering: Technologies for Manufacturing and People (University of Bologna)

Methodologies and technologies for the design and system controls of vehicles, in particular hybrid propulsion vehicle and stability controls

CIRI AERONAUTICA - UNIBO (University of Bologna)

Interdepartmental centre. Among the main objectives: the improvement of the dynamic characteristics of vehicles.

CIRI MECCANICA AVANZATA e MATERIALI - UNIBO

(University of Bologna) - Interdepartmental centre

Research Operating Unit "Automation, Robotics and Mechatronics"

Research Operating Unit "Virtual prototyping and experimental modelling of mechanical systems" – Among the sectors focused on: Motor sports (GP sports motorcycles and Gran Turismo); sports and racing cars)

Research Operating Unit "Advanced materials used in photonic design and applications" – Among the sectors focused on: vehicles and aeronautics; the use of composite materials to improve performance while reducing energy consumption and environmental pollution

Research Operating Unit "Structured and/or composite materials for advanced applications" – Among the sectors focused on: "sports cars and motorcycles"

INTERMECH - Mechatronics: design and development of new products and industrial processes. (Universities of Modena-Reggio Emilia and Ferrara)

Among the sectors focused on: Automotive, Hydraulics and Agricultural Machinery

INTERMECH MO.RE. – Interdepartmental centre for applied research in and services for the advanced mechanics and automotive sectors

Among the sectors focused on: Agricultural machinery

MATMEC – Laboratory of materials for mechanical design and engineering - (University of Bologna, ENEA, CNR and the University of Parma)

Among the sectors focused on: Automotive and motorcycle

PROMINER - Micro and nano-technology aimed at industrial and civil applications

Among the sectors focused on: Automotive

Innovation centres

ISML – Innovation and Development of Materials and Light Metal Alloys www.isml.it

Among the research projects: Dimoter, to provide computer network services to the Automobile and Motorcycle District in Emilia-Romagna

Innovation districts

HI-MECH District - www.hi-mech.it

A high-tech network that connects research laboratories and companies who are leaders in their field

Universities – Specialization courses

University of Bologna www.unibo.it

Three and five year Degree courses in:

- Automation Engineering (Faculty of Engineering)
- Mechanical Engineering

Master's in:

- Analysis and Management of the Automotive Industry (Faculty of Statistical Sciences)

University of Modena and Reggio Emilia www.unimore.it

Held at the "Enzo Ferrari" Faculty of Engineering

Three and five year Degree courses in:

- Mechanical Engineering

Five year Degree course in:

- Vehicle Engineering

Master's in:

- Vehicle Engineering

University of Parma www.unipr.it

Three and five year Degree courses in:

- Mechanical Engineering

University of Ferrara www.unife.it

Three and five year Degree courses in:

- Mechanical Engineering

Politecnico di Milano – Piacenza branch

www.sedepiacenza.polimi.it

Three and five year Degree courses in:

- Mechanical Engineering

Additional facilities the region offers

- 4 racing circuits
- 11 vintage car collections
- 13 museums connected to the world of automotives
- Motor Valley – Website of the Motor Industry in Emilia-Romagna www.motorvalley.it

**Invest in automotive
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For further information:
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