FEDERCHIMICA
CONFINDUSTRIA

THE CHEMICAL INDUSTRY IN ITALY: SITUATION AND OUTLOOK

AUGUST 2019

TRADE DISPUTES ARE WEAKENING GLOBAL ECONOMY, BUT GROWTH WILL NOT STOP

Several sources of uncertainty are affecting 2019. In particular, global trade is weakening due to the tensions between China and the USA, which are not expected to fade away soon in light of China's technological ambitions.

These trends reflect the wider crisis of multilateral international Institutions. More frequent disputes among countries prevent coordination and make economic cycles more volatile. In addition, defining shared global standards on sustainable development could become harder.

Thanks to widely expansionary policies, worldwide economy will keep growing, but at a lower rate (GDP forecasts: after having scored +3.7% in 2018, +3.1% in 2019, +2.6% in 2020). In 2019 and 2020, global trade will remain rather weak (+2.8% and +2.4%, respectively).

As far as Europe is concerned, persistent political uncertainty slows down both investments cycle and purchase decisions in general. In addition to the risks of tariffs impositions by the USA on motor vehicles imports, it is not possible to exclude a no-deal "hard Brexit" next autumn.

Nevertheless, the EU economy will be supported by further monetary policy stimulus, moderately expansive fiscal policies and households consumption (in presence of gradually increasing wages).

In such context, the European economy is expected to go back to moderate growth rates (GDP forecasts for the Euro Area: after having scored +1.9% in 2018, +1.1% in 2019 followed by +1.0% in 2020). Manufacturing slowdown will occur as early as 2019, while in 2020 it will show limited improvements, only (production forecasts for the Euro Area: after having scored +2.0% in 2018, +0.0% in 2019 followed by +1.0% in 2020).

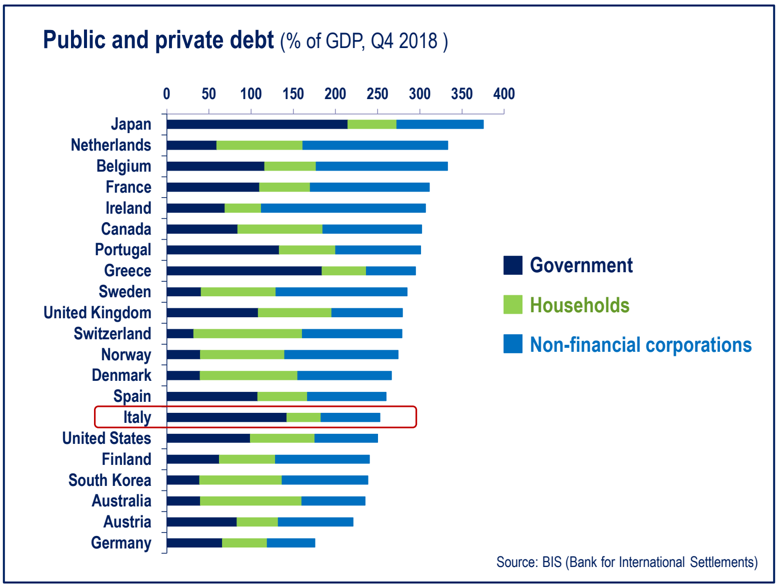
ITALIAN FISCAL POLICY SLIGHTLY RESTRICTIVE IN 2020

As far as Italy is concerned, the increase in public debt (albeit moderate) and the consequent dispute with European Institutions have fuelled new tensions on financial markets, in particular on Government bonds yields. Such tensions have been partially subsided, thanks to the avoidance of the EU Commission infringement procedure's threat for excessive debt as well as to the ECB additional expansionary monetary policies.

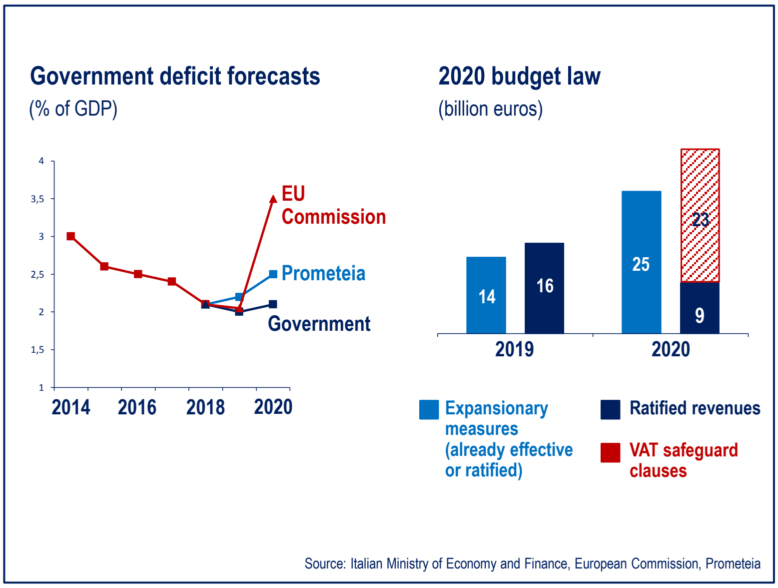
In such a context, the question inevitably arises as to whether Italian public debt is indeed so critical.

Undoubtedly, Italy's high public debt is a burdensome constraint. On the one hand, it withholds considerable amounts of resources to the economy (67 billion euros of interests on public debt to be paid in 2019); on the other, it restricts the possibility of fiscal interventions to contrast cyclical slowdowns or a potential recession (which will come, sooner or later).

Nevertheless, **Italy is not facing an actual insolvency risk**. In fact, **the high public debt is counterbalanced by remarkably low levels of private debt and a considerable share of private wealth**. Considering international comparisons, despite being characterized by one of the largest government debts, Italy shows a good positioning in terms of aggregate debt, compared to other countries affected by substantially wider imbalances.



Italy avoided the infringement procedure for excessive debt, but **the 2020 budget law remains a delicate matter**. In fact, the expansionary measures introduced by the 2019 government budget (the so-called *Quota 100* early retirement scheme and an income support scheme named *Citizenship income*) will reach full implementation, entailing costs approximately equal to 25 billion euros: although being less onerous than initially estimated, such measures currently see limited financial coverage, only.



On the one hand, full sterilization of safeguard clauses (namely, preventing VAT increases in the amount of 23 billion euros) would lead to a budget deficit exceeding 3%, reawakening the debate with European Institutions and therefore financial market tensions. On the other hand, a restrictive budget law of such significant extent would have a recessive impact, worsening the debt-to-GDP ratio, as well.

This context calls for a compromise to be reached between the Italian Government and European Institutions with regard to the fiscal policy, which will necessarily be moderately restrictive in 2020. The outlook proposed by the Prometeia Forecasting Institute suggests partial VAT increases (6 billion euros), modest spending cuts (3 billion euros) and a revision of the so-called *tax expenditures* (9 billion euros), aimed to finance tax reduction measures. Debt-to-GDP ratio is estimated to remain stable in the amount of 133% over the period 2019-2020.

ITALY: MODEST GROWTH, BUT AVOIDING RECESSION

In light of the complex (yet not excessively hostile) international context and the moderately restrictive fiscal policy agreed upon with European Institutions, **Italy will avoid recession but will experience contained growth: more specifically, economic growth is expected to be almost null in 2018 (+0.1%) and very limited in 2020 (+0.5%)**.

The need to limit public expenditure will imply stable **public administration spending** in 2019, slightly declining in 2020 (-0.1%).

Macroeconomic forecasts for Italy
(% change in real terms, unless otherwise stated)

	2018	2019	2020
GDP	**0.7**	**0.1**	**0.5**
Private consumption	0.6	0.5	0.8
Public administration consumption	0.2	0.0	-0.1
Gross fixed investments:			
- machinery and means of transport	3.9	-1.7	0.9
- constructions (*)	1.5	2.0	2.0
Exports of goods and services	1.4	2.2	1.4
Imports of goods and services	1.8	1.1	2.9
Inflation (%)	1.1	0.5	0.9
Employment	0.8	0.5	0.1
Households' disposable income	0.8	1.1	0.7

Notes: (*) net of property transfer costs
Source: Prometeia, Ance

Households' consumption will still be characterized by a moderate expansion (+0.5% in 2019 and +0.8% in 2020), thanks to the implementation of some support policies. Expansionary fiscal policy measures (namely, contractual salary increases for public servants, tax cuts and the previously mentioned *Citizenship income* support scheme) will be only in part compensated for by *tax expenditure* revision and VAT increases; with regard to the latter, only part of them is expected to be transferred to consumption prices. Employment will continue increasing in 2019 (+0.5%), while fading away in 2020 (+0.1, only) as a consequence of the cyclical slowdown. Inflation will remain moderate in 2019 (+0.5%) and show a limited rise in 2020 (+0.9%).

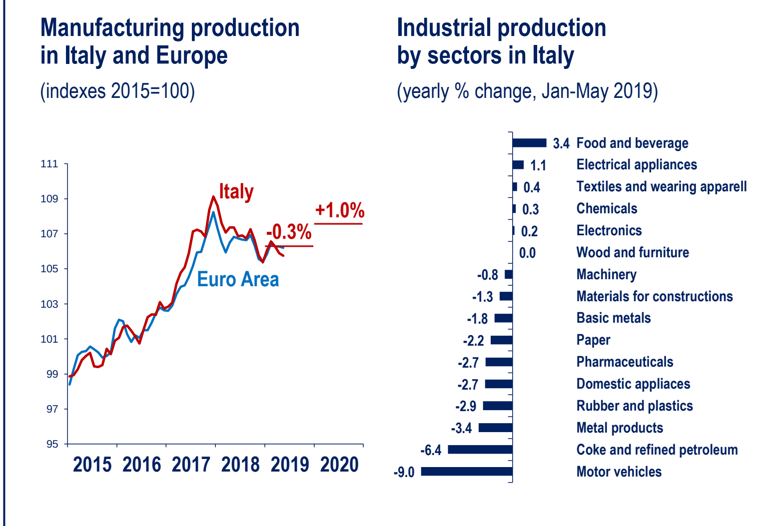
Investments in capital goods in 2019 have been particularly penalized by widespread uncertainty and the weakening of public incentives; they will experience a modest recovery in 2020 (+0.9%), due to companies' renewal needs and still favourable financing conditions.

Growth in **constructions investments** (+2.0% for both 2019 and 2020) is expected to contribute sustaining the economy: in particular, private residential as well as non-residential investments will show signs of recovery after a long-lasting phase of contraction. Recent years' strengthening in public works funding is slowly leading to the opening of new construction sites.

After a modest increase of 1.4% in 2018, a revival in **exports** will occur in 2019 (+2.2%). Between the end of 2018 and the beginning of 2019, increasing uncertainty and an economic slowdown beyond expectation depressed international trade; however, last months' more favourable Euro exchange rates and the weakening of agents' consumption restrictions have contributed to a positive resumption. Nevertheless, 2020 might be characterized by another loss of momentum (+1.4%): factors such as the global economic downturn, a possible no-deal Brexit resolution and a stronger Euro currency (moving from 1.14$ in 2019 to 1.24$ in 2020, on average) will dampen export performances.

ITALIAN MANUFACTURING INCREASINGLY COMPETITIVE AND RESILIENT TO CYCLICAL SLOWDOWNS

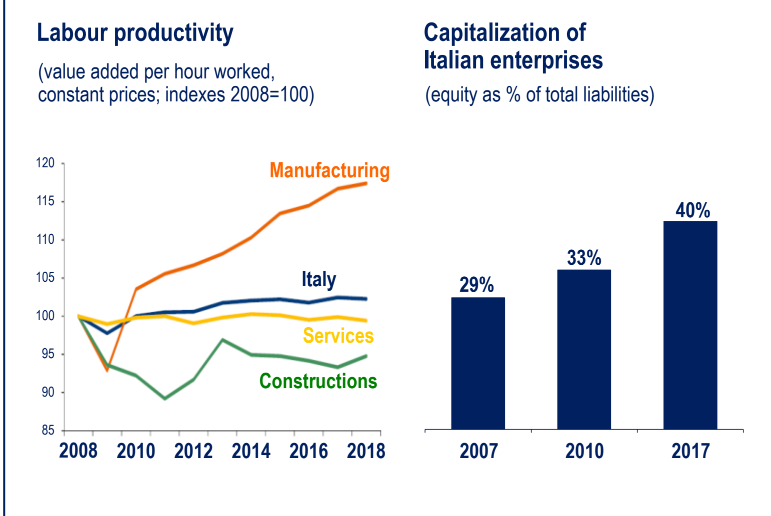
Italian industry has been negatively affected by both national and international macroeconomic conjuncture. During the first semester, the majority of industrial sectors resulted in declines, particularly significant for the automotive and oil sectors (-9.0% and -6.4%, respectively). Food and beverages is the only industry showing a solid expansionary trend (+3.4%), while sectors regarding electrical appliances, textiles and wearing apparel, electronics and the chemical industry itself are characterized by positive yet modest growth.



Source: Istat, Eurostat, Prometeia

Italian industry is still keeping pace with European competitors: despite the precarious and weak national political framework, the manufacturing system is giving proof of remarkable solidity and competitiveness.

Following the severe selection due to the last economic crisis, Italy's industry strengthening is proved by the notable improvements in terms of labour productivity. On the contrary, overall productivity at the national level is still weak, due to the uneasy recovery of constructions (which, on the whole, experienced a 34% decline in the last decade) and, above all, to the service sector stagnation (including not only private companies, but also Public Administration).



Source: Intesa Sanpaolo, Prometeia

Industry has performed successfully also in terms of profitability and capitalization, which makes it less exposed to risks of credit rationing.

Banks have recently showed moderate signs of higher credit selectivity, with particular reference to those sectors that are relatively riskier (such as constructions and furniture); nevertheless, **the threat of a widespread, systemic credit crunch is very limited**. On the one hand, banks advancements in terms of capitalization and reduction of non-performing loans (from 17% in 2015 to 9% in 2019) have been significant. On the other hand, interest rates will remain at substantially

favourable levels, thanks to the expansionary monetary policy conducted by the ECB and the additional refinancing operations announced for banks at easy credit terms.

On the whole, **Italian manufacturing production is expected to experience a slight decline in 2019 (-0.3%) and a moderate recovery in 2020 (+1.0%)**. Sectors with better prospects of growth are those related to non-durable households' consumption.

Italian industry presents a multitude of key strengths proving its solidity, which will allow facing the current cyclical slowdown. In order to keep pace with the ongoing transformations, it will be decisive for enterprises to continue investing.

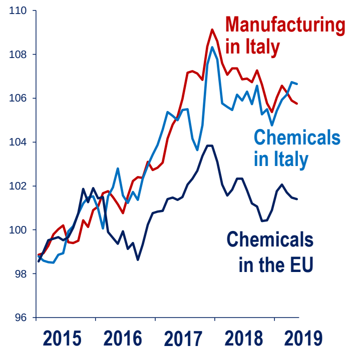
CHEMICAL INDUSTRY IN ITALY: WEAK GROWTH IN BOTH 2019 AND 2020

On balance, chemical production trends in Italy remain weak and highly volatile (+0.3% year-over-year, considering the period January-May 2019). Indeed, current economic slowdown is affecting the manufacturing industry as a whole and a **chemical industry slight decline is in place in all the EU**.

Alongside with the significant contraction in the automotive sector (that is one of the most relevant user of chemical products), almost all other customer sectors are either facing stagnation or downtrends. Consumer goods performances (with particular reference to cosmetics, food and beverages) are more positive, instead.

Widespread uncertainty leads to sectorial fragmented in industrial new orders. Oil price volatility is the consequence of disruptive factors affecting both supply and demand sides, namely geo-political tensions (USA-Iran, in particular) and the uncertainty affecting global demand.
In turn, volatility intensifies fluctuations in chemical sales and may give rise to imbalances between provision costs and final prices.

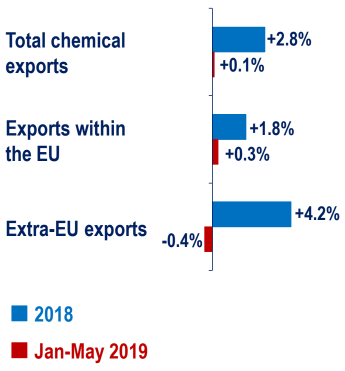
Chemical and manufacturing production
(indexes 2015=100)



Yearly % change (in volume)	2018	Jan-May 2019
Chemical industry in Italy	+0.5%	+0.3%
Chemical industry in the EU	-0.6%	-0.4%
Manufacturing in Italy	+0.9%	-1.1%

Source: Istat, Eurostat

Italian chemical export
(yearly % change, in value)



Export performances on the main end markets
(% share and % change, in value)

	% share 2018	% var. 2017-18	% var Jan-May 2018-19
Germany	14.4	+5.6	-3.4
France	10.4	+4.1	+1.0
Spain	7.0	+5.5	-3.5
USA	6.0	+10.9	-1.0
UK	4.2	+2.5	+7.9
Turkey	3.7	+8.4	-15.8
Poland	3.5	-6.8	+7.0
Netherlands	3.3	+19.5	+3.9
Belgium	3.2	-7.4	+1.1
China	2.7	-5.8	-4.6
Switzerland	2.2	+6.3	+1.8
Russia	1.8	-3.8	-8.7
Romania	1.8	+6.6	+8.9
Austria	1.8	+4.2	+2.4
Czech Rep.	1.6	-7.6	+5.2

Source: Istat

Unlike recent past, export is not performing as the usual driving force for the chemical sector (moving from +2.8% in 2018 to +0.1% in the first semester of 2019, in value): sales to extra-EU countries have moderately decreased (-0.4%), while showing slight increases with respect to EU countries (+0.1%).

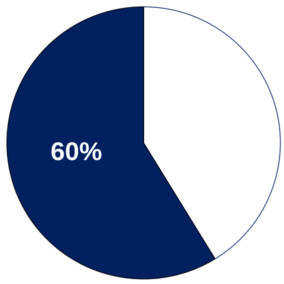
Among the main destination markets, the decline in sales to the German market (-3.4%) is particularly influential (being Germany the main trading partner for Italy); however, downturns in exports towards Spain (-3.5%), China (-4.6%), Russia (-8.7%) and Turkey (-15.8%) are quite significant, as well. The increase in sales in the UK (+7.9%) might be due to precautionary warehousing phenomena in case of Brexit becoming effective in autumn.

The chemical industry in Italy is highly integrated with global markets. In fact, about 60% of production value in Italy refers to multinational companies, either domestic (22%) or foreign-owned (38%).

In such a context, both tariffs and the threat of a trade war between China and the USA are significant causes of concern. In addition to potential disruptions in supply chains, increases in imports pressure are feared, too, with particular reference to both Italian and European basic chemicals industries: in fact, while China might fail to absorb the vast Middle East supply, in the USA considerable investments are coming on stream to exploit shale oil and gas competitive costs.

In absence of a significant recovery in the European economy, persisting geo-political tensions and the expected global economic slowdown will negatively affect chemical production growth perspectives in Italy, not only in 2019 but also in 2020.

Chemical production of domestic and foreign-owned multinational companies (%)

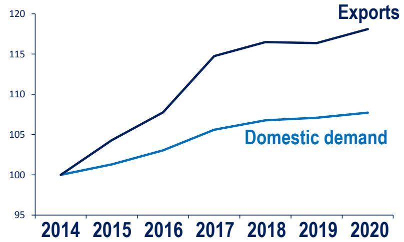


Source: Istat, Federchimica; 2018

Outlook for the chemical industry in Italy

	2018 (billion €)	2018	2019	2020
		(% change in volume)		
Domestic demand	64	1.1	0.3	0.6
Imports	31	2.3	0.0	1.5
Exports	39	1.5	-0.1	1.5
Production	56	0.5	0.3	0.5

Domestic demand and exports
(volume indexes, 2007=100)



Source: Istat, Federchimica

In addition, next Italian Budget Law could give rise to further frictions between the national Government and European Institutions, which would result in aggravating uncertainty and financial stress.

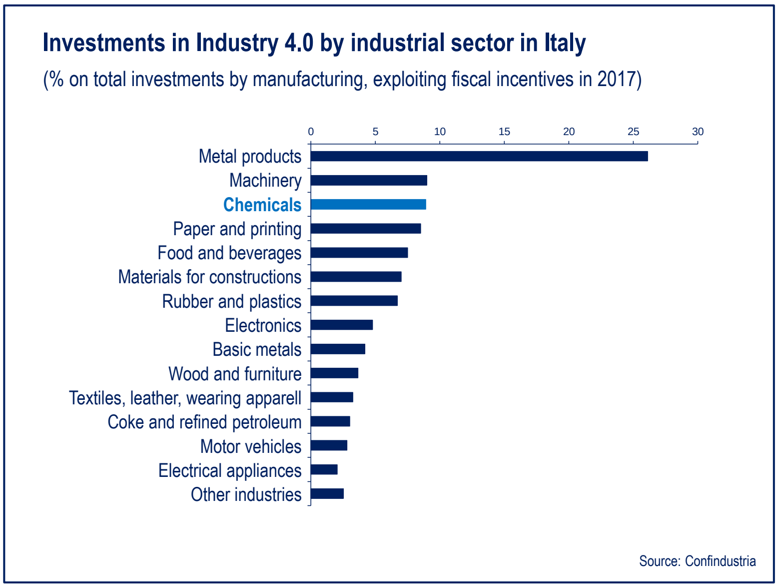
There are other slowing-down factors which directly affect the chemical industry, as well. On the one hand, despite entering into force in 2021, the ban on single-use plastics (a sector with

reference to which Italy boasts a European leadership) has already impacted sales. On the other, **indiscriminate media campaigns are inveighing against plastics without any scientific evidence. It is worth recalling that plastic packaging plays a major role in the fight against food waste and the amount of CO_2 emissions due to its manufacture is significantly lower than the food-waste-related emissions which would occur in absence of suitable means of conservation**: for instance, plastics prevents the emission of 13 kilograms of CO_2 per kilogram of meat produced.

On the whole, **chemical production in Italy is expected to grow weakly in both 2019 (+0.3%) and 2020 (+0.5%)**, with significant downside risks in case the macroeconomic scenario deteriorates (at both national and international level).

THE CHEMICAL INDUSTRY CONTINUES INVESTING IN THE FUTURE

Among industrial sectors, the chemical industry is one of the most solid: **its growth in the last four years has doubled the European average (+7.0% in Italy, compared to +3.3% in the EU)**, its returns to investments are more than 4 percentage points higher than the manufacturing average in Italy and it shows the lowest share of non-performing loans (2.2% with pharmaceuticals, compared to an average value of 11.5%).



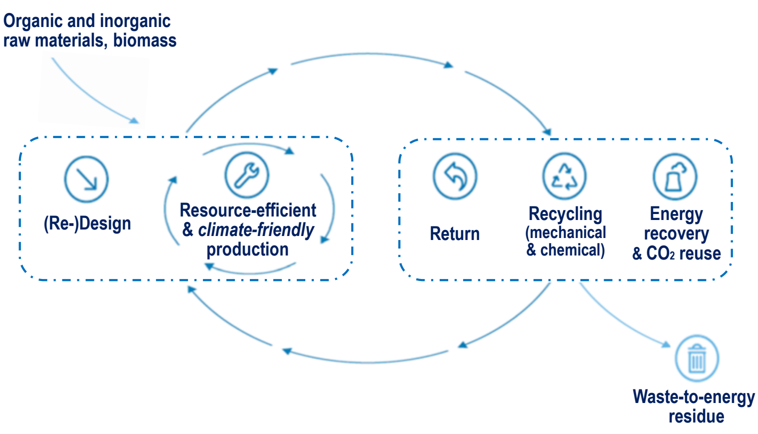
In light of the current cyclical slowdown and the ongoing season of deep technological and social changes, the chemical industry is conscious about the importance of keep on investing on the future. In fact, **it is the second industrial sector in terms of investments related to Industry 4.0 (380 million euros, following the metal products and machinery sectors, only)**.

Digitalization offers a wide variety of opportunities: for instance, it will help improving chemical sites' productivity as well as flexibility, allowing the provision of increasingly customized products at little costs and widening the set of related customer services.

The area of interest where Industry 4.0 potential is greater is undoubtedly the implementation of circular economy models, thanks to the collection and sharing of big data among supply chain players, as well as to processes' improvement throughout the entire life cycle of products.

AT THE FOREFRONT OF CIRCULAR ECONOMY, BUT WITH THE NECESSARY COMMITMENT OF INSTITUTIONS AND CITIZENS

The chemical industry plays a strategic role in the implementation of circular economy paradigms: in fact, **it is located upstream of different supply chains and is endowed with the technological competence in terms of substance management and matter transformation that are necessary to manage and lead change**.



Source: VCI (Verband der Chemischen Industrie) & Deloitte, Federchimica; 2017

Chemical products from renewable resources are just one of the many contributions the chemical industry as a whole could give to circular economy. Furthermore, renewable raw materials are not always more sustainable than traditional ones: only products' Life Cycle Assessments provide exhaustive evaluations to identify what the optimal solutions are.

The relevance of these challenges and Europe's ambition to lead on circular economy are such that interventions alongside the whole life cycle are necessary, with the use of a wide set of different technologies which are either already available or under development.

Additional improvements will be made with reference to efficiency and sustainability in production, two areas in which progresses are already remarkable considering that greenhouse gases emissions have been cut down by 61% and energy efficiency has been improved by 55% since 1990. Furthermore, a significant contribution will derive from the so-called *eco-design*, that is the new design of products oriented to increase resource efficiency and to facilitate materials reuse, recycling and recovery.

Another substantial field of intervention regards the **radical rearrangement of waste management practices**. **The strengthening of waste sorting and mechanical recycling is crucial; however, relying only on these two methods is illusory**. A key role will be played by **chemical (or molecular) recycling**, as well, namely the decomposition of chemical chains to produce fuel or new raw materials. These technologies are still under development, nevertheless they are characterized by constraints regarding certain materials in particular. As a consequence, **it is not reasonably conceivable to do without waste-to-energy plants, now nor in the future**.

On the whole, the chemical industry is at the forefront in facing the challenges of circular economy. However, it cannot do without the **commitment of Institutions to provide a stable and scientific-evidence-based regulatory framework and adequate infrastructures,** nor without the **efforts of citizens, whose behaviour is determinant**.

Headquarters

20149 **Milano**
Via Giovanni da Procida, 11
Phone. +39 02 34 565. 1
Fax. + 39 02 34565.310
federchimica@federchimica.it

00186 **Roma**
Largo Arenula, 34
Phone +39 06 54273.1
Fax. +39 06 54273.240
ist@federchimica.it

1040 **Bruxelles**
Avenue de la Joyeuse Entrée, 1
Phone +322 2803292
Fax. +322 2800094
delegazione@federchimica.eu

www.federchimica.it