INFORMATION + ENFORCEMENT = CONSUMER PROTECTION

ETRMA ANNUAL REPORT 2011/2012

EUROPEAN TYRE & RUBBER manufacturers' association

ETRMA members

TYRE CORPORATE

Apollo Vredestein
www.vredestein.com

www.bridgestone.eu

www.conti-online.com

www.coopertire.com

www.goodyear.com

www.hankooktire-eu.com

www.marangoni.com

www.michelin.com

www.mitas.cz

www.nokiantyres.com

www.pirellityre.com

www.trelleborg.com

NATIONAL ASSOCIATIONS

Belgium
www.federplast.be

Finland
www.kumiteollisuus.fi

France
www.lecaoutchouc.com

Germany
www.wdk.de

Italy
www.federazionegommaplastica.it

The Netherlands
www.vereniging-nvr.nl

Spain
www.consorciocaucho.es

AFFILIATED MEMBERS

Tyre Corporate – BRISA
www.brisa.com.tr

National Association – UK: BTMA
www.btmauk.com

Hungarian Tire Association
www.hta.org.hu/

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ETRMA Mission

As the Spokesman of tyre and rubber goods producers to various European institutions, ETRMA activities focus on the following key interdependent areas: representation, co-ordination, communication, promotion and technical liaison.

Representation

The primary objective of ETRMA is to represent the regulatory and related interests of the European tyre and rubber manufacturers at both European and international levels. ETRMA is the sole interlocutor, specifically designated by the European tyre and rubber producers to carry out this critical task. To work effectively, we are involved in continual dialogue with the relevant EU and international institutions, national agencies and other industry sectors.

Co-ordination

Efficient representation requires effective co-ordination between members. ETRMA acts as the co-ordination centre for the European tyre and rubber industry.

Communication

Successful representation and co-ordination activities require clear and effective communication, both with our members and external institutions. ETRMA is committed to ensuring that members are always consulted on any policies and regulatory issues that might affect the sector. In addition, we are fully committed to defining and communicating our members' common position to the relevant authorities on these issues.

Promotion

ETRMA endeavours to further enhance the image of the tyre and rubber industry by informing authorities of our policies and subsequent actions in areas including the economy, health, safety & environmental protection and transport. ETRMA is also committed to ensuring public awareness of the significant advances achieved by the tyre and rubber manufacturers in these different areas.

Tyre Technical Liaison

ETRMA works closely with ETRTO (European Tyre and Rim Technical Organisation), which is responsible for standardisation of technical performance requirements for tyres, rims and valves.

European Tyre & Rubber Manufacturers: A dynamic and contributing presence in Europe

Key 2011 data

from ETRMA members in EU27 + Turkey*:

Number of companies Tyre Corporate Companies	~4,200 12 headquarters 91 tyre manufacturing facilities 15 R&D centres		
Direct employment	**374 000**		
Turnover ETRMA tyre members, EU 27	€ 47 Bn € 29 Bn 6 out of top 10 global tyre companies are ETRMA members, comprising 65 % of the world tyre industry turnover (2011 ranking)	[= + 8% / 2010] [= + 13% / 2010]	Source: ETRMA Source: ERJ
Tyre production **GRG production**	**4.8 million tonnes** European tyre production represents 24 % of the world tyre production estimated at 20 million tonnes **2.9 million tonnes**	[= +6.6 % / 2010] [=+26% / 2010]	Source: ETRMA
Tyre replacement sales Passenger car & light commercial vehicle tyres Medium & heavy commercial vehicle tyres	**301.7 million units** 289 million units 12.6 million units	[= +4.41% / 2010] [= +4.21 % / 2010] [= +9.10 % / 2010]	Source: ETRMA, Eurostat
Vehicle park** Passenger car park Truck park	**273.6 million units** 269 million units 4.6 million units	[= - 0.7 % / 2010] [= - 0.7 % / 2010] [= + 4 % / 2010]	Source: LMC
Exports (€) Tyre GRG **Exports (units)** Tyre	**+ € 9,2 Bn** + € 5.2 Bn + € 4 Bn 71.2 million units	[= +16.4 % / 2010] [= +30 % / 2010] [= +2.6 % / 2010] [= +11.5 % / 2010]	Source: Eurostat
Imports (€) Tyre GRG **Imports (units)** Tyre	**+ € 10 Bn** + € 6.6 Bn + € 3.4 Bn 215.7 million units	[= +16.2 % / 2010] [= +32% / 2010] [= -5.5 % / 2010] [= +8.2 % / 2010]	Source: Eurostat
R&D investments in tyre companies Tyre GRG	 Up to 3.5% of annual turnover Up to 5% of annual turnover		Source: ETRMA

(e) estimated * except in export/import figures

** excluding Bulgaria, Cyprus, Estonia, Lithuania, Latvia, Malta and Turkey

Message from the President, Patrick Lepercq

In a time of economic difficulties for Europe, ETRMA focussed its work in 2011 on pushing for a strategy for a competitive and sustainable automotive industry which would support strong, innovative, and competitive enterprises along the entire value chain.

The crisis made it apparent that what could be sustainable in a normalised scenario is no longer tolerable, and the status quo for the European rubber and tyre industry cannot be maintained if we are not ready to face the challenges of sustainable mobility. Availability of key raw materials, their lower consumption rate together with less volatility in their price are key to the future of our industry. Furthermore, more and better recycling, a shift in energy supply and the need for new skill profiles and employment patterns are challenges to our industry which need to be properly tackled at both EU and industry level.

In this difficult economic environment, competitive pressure at global level keeps increasing while, at domestic level, new and stringent regulations are putting pressure on European industry.

This is increased by poor enforcement of these regulations, below par Member States' market surveillance and unfair trade barriers in key Asian countries, which in turn enjoy growing exports to Europe.

In Europe, the tyre and rubber industry had to make significant investments in technology to comply with new EU requirements, such as REACH and, for the tyre industry, labelling and type approval requirements for all categories of tyres. This means that, from November 2012, tyres will have to be more efficient and safer through lower rolling resistance, lower noise and higher grip. In one word, tyres have to be better.

The recent High Level Group CARS 21 Report clearly recognises the need for designing enforcement measures to secure effective market surveillance. It is urgent that the Commission and Member States work together to put in place appropriate sanctions for non-compliant products to stop a growing trend of low quality, potentially non-EU compliant imports in Europe. ETRMA is calling for proper mechanisms to be put in place and tyre-specific measures to be designed and included in the Commission's future *Action Plan for CARS 2020*.

At a time when we see the growth of various poles of influence within the EU (European Commission, European Parliament, Council), Member States with national voices, consumers and NGOs, plus the growing influence of countries/regions outside Europe, ETRMA needs more than ever to have a strong global force of initiative and negotiation to protect and promote the leading performances of our industry on products and technologies.

National associations are the natural partners of Member States' governments and continue playing a full role in deploying the strategies and messages elaborated at EU level. For this reason, I heartily thank them and rely on them to continue this excellent co-operation in the future.

I would like also to thank all of our ETRMA members for their continuous and strenuous work, and the ETRMA team in Brussels for its skills in ensuring that our positions are well received and given due consideration. I am confident that ETRMA will be at the heart of the challenge that our industry is facing in Europe and will continue to make the voice of the EU tyre and rubber industry heard.

Patrick Lepercq

Report from the Secretary-General, Fazilet Cinaralp

2011 has been a year of great challenges for the European tyre and rubber industries. A dire economic situation was coupled with very ambitious legislative plans from the European Institutions - and our industry worked hard to comply.

With the preparation for the coming into force of the EU regulations setting new minimum requirements for tyres and tyre labelling, 2011 has been a year that, more than any other, reminded our sector that every step related to the production and selling of the tyre is minutely regulated. The European tyre sector took the push given by EU regulation as an opportunity to become more competitive in the world economy.

A year on, it is time to measure the progress made and take advantage of it! To do so, it is necessary that EU and national authorities seriously engage in activities to exclude from the market those tyres that do not meet the requirements that have been set, as well as those that lie about their performances. This is not only a matter of defending the work of companies that invested capital and energies to comply with the new regulations, but also to defend the European consumers and drivers from tyres that are neither well-performing nor safe.

> “2011 was all about competitiveness, this year is all about making sure that the targeted competitiveness brings its fruits for EU consumers, drivers and manufacturers!

2011 was also a key year with regard to the regulatory future framework of the automotive industry. In this sense, the work of CARS 21 was for ETRMA of utmost importance. ETRMA worked ceaselessly to promote the priorities of the European tyre industry: full compliance with EU legislation from all market players, prevention of double legislation on tyres and creation of a future legislative framework that will not only achieve sustainability of production and protection of the environment and EU consumers, but also a higher level of competitiveness for the tyre and the automotive sector in general on the growing world markets.

The continued tight supply of rubber and the partial monopoly of its production in South East Asia result in high price volatility, which poses serious risks to competitiveness within the whole sector. It is for this reason that ETRMA has been participating and contributing in the work of the International Rubber Study Group (IRSG). 2011 was a year of particular difficulty for this institution as some of the most important rubber producers (Thailand and Malaysia) decided to leave it. ETRMA, and the industry at large, has worked (and will continue to work) hard to ensure that the current Member States' governments put all their weight behind the IRSG and all international negotiations to reinforce this institution.

Fazilet Cinaralp

SECTION 1

Promoting European competitiveness is protecting consumers

Smart regulation for the benefit of people and businesses: Simplification of legislation, cutting red tape for business, carrying out impact assessments before developing new legislative texts and systematic "fitness checks" on enforcement and implementation are the pillars of the principle of smart regulation announced by the EU in 2010.
However, the tyre and rubber sectors have recently been heavily regulated and there is strong pressure on the automotive sector for more regulation, before the current regulation could be effectively implemented and enforced.

EU legislation: an unprecedented effort is required from the European tyre and rubber industry

> "Pushing innovation through legislation as well as defending European consumers is often the ambition of the EU when developing new regulations. This approach resulted in the tyre industry being one of the most regulated industry sectors in the EU. However, neither objective will be achieved if these regulations are not correctly enforced and clear sanctions provided for."
> *Fazilet Cinaralp, Secretary-General ETRMA*

In 2011 significant investments were made by the tyre industry in getting ready for the starting date of legislation concerning new minimum requirements on noise, wet grip and rolling resistance, as well as tyre labelling. The work towards compliance with this new legislation was coupled with investments to satisfy the needs of European consumers, who demand increasingly higher-performing cars that require ever more efficient tyres on many more performances than the three above regulated.

> "In order to ensure vehicles and their components are safe and compliant with relevant legal requirements, the (...) framework should be enhanced to include provisions for market surveillance in areas where a need has been identified. This will contribute to establishing a level playing field among all actors and to increased trust of consumers in effective product regulation, while limiting administrative burdens."
> *CARS 21, Final Report*

The tyre industry is one of the most heavily regulated industries, since the EU legislation now covers almost all aspects of these products' performances and characteristics:

- Safety related performances;
- Environmental performances (both energy for production and for use and other emissions such as rolling noise);
- Sustainability of production;
- Sustainability and safety of compounds used;
- Consumer friendliness of product information;
- Sustainability of the life cycle of products.

Tyre and rubber industries have complied (or are in the process of complying) with these regulations at considerable costs, along with taking other market-driven actions in order to maintain and further enhance their competiveness in the European and international markets.

The European market is also **the most technologically advanced tyre market in the world**. The consumers, including vehicle manufacturers, demand a high level of safety, performance, quality and, more recently, environmentally friendly tyres at acceptable economic conditions.

However, ETRMA feels that these efforts are hampered by the lack of instruments for a correct, full and timely implementation of the existing legislation and its cumulative effect.

Risks of double legislation: the case of the Regulation on Sound Level of Motor Vehicles

The European Commission published in December 2011 a proposal for a Regulation which looks at establishing a new test method and new limits for sound levels from motor vehicles.

It is broadly accepted that vehicle legislation need to be complemented by legislation to influence driver behaviour, tyre/road surface improvements, traffic management, noise source isolation and other infrastructure measures.

As tyres have recently been regulated through the General Safety Regulation (EC)661/2009, CARS 21 recognised this reality in its report and calls for caution to avoid introducing provisions that may result in double legislation for tyres. The European Parliament is currently discussing this Regulation and aims to vote on it in autumn 2012.

"The new legislation for vehicle noise emissions should duly take into account the efforts made by the tyre industry to meet the noise requirements set out in Regulation (EC) No 661/2009 and should avoid double legislation for tyres".

CARS 21, Final Report

CARS21: ensuring competitiveness in the automotive sector for the benefit of the consumers and the industry

ETRMA greatly contributed to the work that led to the adoption of the Final Report of the Competitive Automotive Regulatory System for the 21st century (CARS 21) High Level Group. The report sets an ambitious industrial policy strategy for the automotive sector. Furthermore, it gives the green light to the EU Institutions, Member States and the automotive industry to start working towards the deployment of an action plan to achieve the objectives that CARS 21 negotiated during this two-year-long process.

CARS 21 Participants

> "... Not only does the final report of CARS 21 bring innovation to the centre of the 2020 strategy, but it recognises the need to establish a level playing field, at home and abroad, as the condition for enterprises to be successful in a globalised economy."
> *Patrick Lepercq, President ETRMA*

The report takes into account the new challenges that the European tyre industry is currently facing, including the need for fair access to raw materials, new skills and more flexibility in employment matters, compliance with new and sophisticated legislation towards safer and greener products, and making the production process more efficient and sustainable.

ETRMA welcomed in particular the focus on 'smart' regulation. The recent European crisis and financial problems have evidenced the need for good regulations and the need for ensuring that legislation and markets can deliver.

While EU players are called to compete within these new and more stringent conditions, the competitive pressure from third countries keeps increasing. At the same time, the access to these countries is often hampered by technical and bureaucratic barriers, which are difficult to overcome.

The Final Report clearly recognises the need for designing enforcement measures to secure effective market surveillance. This will contribute to establishing a level playing field among all market operators, and to increased trust of consumers in effective product regulation.

The **CARS 21 High Level Group** was originally launched in 2005. It played a major role in the defining of European policy and simplifying legislation in the automotive sector, especially in view of strengthening the industry's competitiveness. Its re-launch was one of the actions listed in the European Commission Communication on *"A European strategy on clean and energy efficient vehicles"*, adopted on 28 April 2010. Unlike the first CARS 21, which was an informal project, this re-launched Group was formally established through Commission Decision of 14 October 2010. It has the status of an official Advisory Group of the Commission. The Group's main task was to develop a realistic vision for *"a competitive EU automotive industry and sustainable mobility and growth in 2020 and beyond"*. Based on this vision, the Group sketched out the recommended actions and policies to realise the vision, taking into account the likely changes in technologies and framework conditions.

As Commission Vice President Tajani has already stressed: "the Final Report of the CARS 21 High Level Group is not the end of the process but rather a starting point". During the autumn the Commission should adopt a Communication to deal with the implementation of the recommendations detailing specific actions and their integration in the different EU policies.

Market access and trade policy

International negotiations

Enhancing competition at European and international level has been for many years one of the main objectives of the European Commission. However, while the EU has greatly opened its market to foreign products, the same cannot be said about the most interesting markets for the tyre industry. Non-tariff barriers together with unjustified administrative burdens are becoming increasingly popular in a time of crisis and are making accessing these markets particularly difficult.

Market access

"Our experience of the negotiation process of FTAs clearly showed the importance for the EU institutions and the EU industry to work together in order to achieve better and more ambitious results. However, the work is not finished and ETRMA stands ready to continue this fruitful cooperation."
Marta Conti, Advisor, Trade and Parliamentary Affairs - ETRMA

ETRMA fights intensely against market-access barriers. The most pressing issues in 2011-2012 were the Indian Quality Control Order and the Korean Operation Bulletin of the Quality Management and Safety Control of Industrial Products Act, which opened up discussion into results achieved through the Free Trade Agreements.

However, ETRMA has also taken action concerning Indonesia and ASEAN countries, Russia, Argentina and Algeria, to name but a few. Through the WTO TBT notification system, ETRMA commented on the draft regulations of India, Korea, Canada, Brazil, Indonesia, Mexico, Taiwan, the US and Oman.

In the case of India, some of the problems identified in 2010 – for example the different treatment of Indian and foreign companies – have been solved. However, others – such as the ban on selling ISI (Indian marking) marked tyres out of India – have been solved only nominally, as the promises made by the Indian government were not followed up by appropriate legislative changes.

Regarding China, the European Commission and its delegation in Beijing organised the Expert Round Table meeting in February 2012. ETRMA and representatives from the Chinese industry as well as EU and Chinese authorities met in Beijing to exchange information and explore possible ways for harmonisation of the technical and administrative prescriptions of tyre regulations. ETRMA also co-operated with the Commission concerning the regulatory dialogue meetings between the Commission and China.

The European Commission showed great commitment to any activity that would contribute to the removal of trade barriers and, for this reason, ETRMA will continue to support any activity of the Commission in this sense.

Free Trade Agreements (FTA): the case of Korea, one year on

In the negotiation of the FTA with Korea ETRMA saw an opportunity to eliminate non-tariff barriers standing in the way of closer trade relations with that country. The FTA came into force in July 2011 and since then ETRMA has worked alongside the European Commission to make sure that the Agreement is correctly implemented. Unfortunately, hurdles in the way of its implementation have made it so far impossible to assess how beneficial this FTA has been. The removal of tariffs, however, is likely to have had a positive contribution to the increase of exports of tyres from the EU to Korea. Since 2007, this has tripled, but it remains rather small compared to Korean export levels, also due to the difference in size of the two markets.

Other FTAs are being negotiated by the EU with third countries. ETRMA maintains that these need to be negotiated carefully as FTAs that do not succeed in legal approximation and in dismantling non-tariff barriers are deemed to fail to achieve their objective of better trade relations and should therefore be avoided. In the context of FTAs, ETRMA calls for the dimension of raw materials to be included in the negotiations, something that it is largely recognised as necessary in the "EU Trade Policy for Raw Materials".

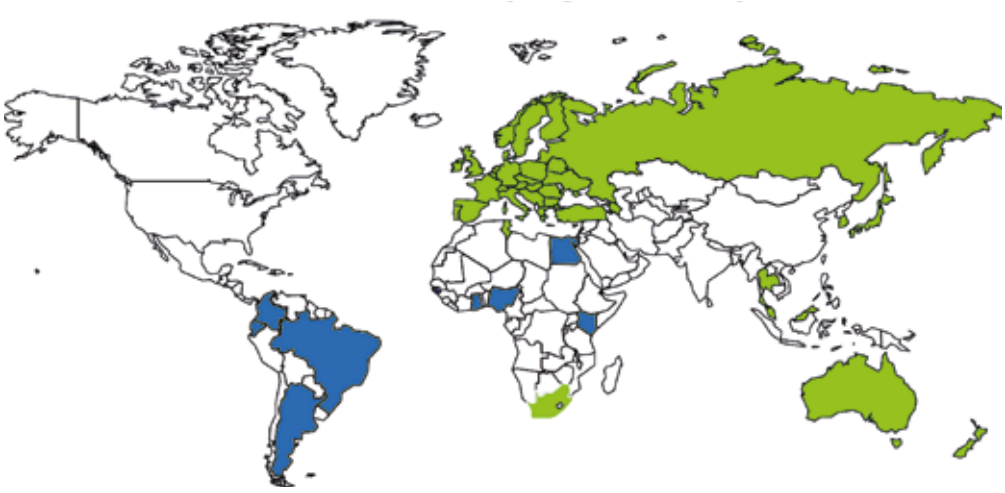
International harmonisation

Global products, such as tyres, require global rules in order to grant a level playing field in which all manufacturers can compete on an equal footing. It is for this reason that ETRMA has been working to promote global technical standards and performance requirements as well as mechanisms to establish effective cooperation.

In this context, technical harmonisation through UNECE 1958 is key to allow the application of a common set of type-approval standards. This would make sure that a product judged as conforming in one national legislation could be recognised as such in another.

GENEVA / UNECE 1958 AGREEMENT

Contracting Parties Countries accepting E-marked tyred



Market Access Working Group on Tyres – Active since June 2008

As part of the EU Market Access Strategy, the Commission has established 10 sector-specific Working Groups. One of the first Working Groups focuses on tyres. This Group usually meets twice a year, bringing together the Commission in Brussels and its representations in foreign countries (via video links), Member States and European tyre industry representatives. The Group looks at practical ways of solving market access barriers.

It is for this reason that ETRMA maintains that all trade negotiations carried out by the EU should aim at reaching further legal harmonisation through UNECE. This would help the elimination of non-tariff barriers, particularly towards those countries that have most enjoyed access to the European market. In this sense, dialogue with Indonesia has been most fruitful as accession to UNECE 1958 should take place in 2012. With other countries, however, negotiations have not been as fruitful, with India's closure to any negotiation in this sense being the most disappointing case.

Concerning some important world economies (e.g. China, Russia), the bilateral regulatory dialogues have proven to be important forums to exchange information and address specific issues on a political level. ETRMA has actively co-operated with the Commission on these dialogues.

However, regulatory dialogues are not sufficient: some of our global trading partners tend to resort increasingly to non-tariff barriers (NTBs), be they technical or administrative in nature, to hamper our access to their markets. **For this reason, ETRMA calls for the Commission to systematically introduce binding chapters on NTBs in all trade agreements with third countries.**

EU external reliance of essential raw materials:

Raw materials are at the basis of a large number of industrial value chains in the EU. Many EU-based industries depend on sustainable supply of raw materials from global markets. Such sectors, including inter alia aerospace, automotive, chemicals, construction, equipment and machinery provide today a total added value of EUR 1300 billion and employment for 30 million people. Moreover, the industrial development in the EU of some critical green technologies also depends on ensuring a sustainable supply of specific raw materials.

EU Trade Policy for Raw Materials Second Activity Report

Raw materials

Promotion of competitiveness through transparency in the natural rubber market

The EU tyre and rubber industry is completely reliant on imports of natural rubber from third countries and particularly from South East Asia. For this reason, the whole European rubber sector needs transparency and predictability in the market. To do so, it is essential that production of natural rubber is sustainable and that it can be expanded to other areas of the globe through direct foreign investments (private and public). The EU should also make sure that trade mechanisms are put in place to avoid the risk of export restrictions, especially with the four main natural rubber producers: Malaysia, Thailand, Indonesia and Vietnam.

Given that the EU is a net importer of almost all automotive raw materials, the industry depends on a competitive supply at competitive prices. It is for this reason that access to raw materials from third countries is of great importance for the EU tyre and rubber industry. In this context and to restore a level playing field, the **removal of trade distortions should be a priority in raw material policies**. This would allow for increased planning reliability for the industry as well as guaranteeing a sufficient supply for regions lacking these resources.

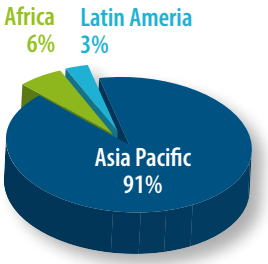
The EU is the second biggest consumer of natural rubber (1.4 million tonnes in 2008), after China (2.9 million tonnes). Both the tyre and rubber goods industry are completely dependent on imports of natural rubber from third countries. Despite potential in Latin America as well as Africa, the main producers and exporters of natural rubber remain Thailand, Malaysia, Indonesia and Vietnam.

The **stability, predictability and transparency in market fundamentals remain key**. In this context, the role of the International Rubber Study Group (IRSG) should be strengthened as it offers a platform for dialogue and a tool for intensifying industrial co-operation between (natural) rubber consuming and producing countries. In 2011 and the beginning of 2012, ETRMA has been active in supporting the work of the Group. We think it is essential to co-operatively plan global supply and demand of the products relying on these limited resources, by building and providing reliable, authoritative statistics.

A lot in the hands of a few

In April 2004, Indonesia, Malaysia and Thailand set up the International Rubber Consortium Ltd, to carry out strategic market operation to ensure a balance between production and consumption of natural rubber.

On October 22 (2011), the "cartel" agreed to cut supply as a way to curb and shore up rubber prices that have fallen sharply over the last few weeks... IRCO agreed on 4 measures: jointly reducing plantation areas, felling old trees, reducing the frequency of tree tapping and asking businesses to refrain from selling rubber at cheap prices [Bangkok Post, Oct 18].



Source: International Rubber Study group

This announcement made it clear that the model on which rubber export is organised is flawed and results in production and price volatility. Furthermore, the financialisation of natural rubber and other commodity markets has had a real impact on the sector.

It is for this reason that ETRMA will continue to insist that the rubber market should be more transparent. To achieve this, it is essential that the EU reinforces its activities in the region and ensures that fair access to these raw materials should be granted to the European tyre and rubber industries.

Looking for alternatives

Almost all natural rubber is extracted from one biological source: the Brazilian rubber tree (*Hevea brasiliensis*).There is currently no viable substitute to natural rubber that could be used as a replacement in all its applications. That means that the only way to find alternatives to the South-East Asia oligopoly is by expanding natural rubber production to other regions of the world. However, the tyre industry is investing in research to identify alternative sources that in time could prove a valid substitute to natural rubber in tyre production.

Making rubber out of flowers: Russian dandelion and guayule
Russian dandelion and guayule are plants that are common to most temperate countries, with the first one being very common in Europe and the latter in the United States. Russian dandelion – *Taraxacum kok-saghyz* – and guayule have almost identical qualities to natural rubber harvested from the Hevea tree.

Research on these plants started as early as the 1920s, but it is only very recently that the hurdles that stood in the way of its commercial feasibility have started to be tackled through technological developments.

Sustainability of production, as well as independence from third countries for the raw materials, rely on the success of current research and ETRMA will continue to push for the EU to support these efforts.

A plant of guayule

Flowers of Russian dandelion

SECTION II
Health & environment

Consumer protection through scientifically sound legislation!

Having a safe and healthy environment for European workers and consumers is one of the key objectives of the European Union. To achieve this, the EU has adopted a number of legislative measures that have direct effects on all stages of rubber and tyre production. In order for these policies to reach their objectives, it is necessary that they are based on sound scientific data and on specific knowledge of the production procedures, which would make their implementation and enforcement more effective. For this reason, a dialogue between industry and lawmakers remains essential to protect European consumers and promote the industry's competitiveness.

REACH

Consumers protection: Ban of high PAH oils in tyres – Market surveillance

Within the REACH process, tyre production was greatly influenced by the entry into force of a ban on high aromatic oils in tyres from January 2010. EU tyre producers complied with this legislation at a high cost, as this meant changing the composition of their tyres. **With the aim of protecting consumers and the environment**, and to ensure a level playing field, ETRMA developed an extensive testing programme for checking compliance of tyres placed on the European market. Following the results of the 2010 testing campaign, ETRMA performed a second campaign, conducted between April and September 2011, confirming that 10% of the sampled tyres are non-compliant, containing prohibited PAH levels.

Source European Rubber Journal - Global Annual Report 2011 www.european rubberjournal.com

The presence of these illegal tyres on the European market raises major concerns about the enforcement of European legislation designed to enhance the safety of tyres and of other products.

ETRMA continues to call on the EU and national authorities to intensify and broaden their own testing and enforcement activities and to impose swift and dissuasive sanctions on those who do not comply with the EU law. On the other hand, it is equally important that tyre distributors, importers and the retail industry request confirmation from their suppliers that their tyres are fully compliant with the REACH regulation.

Consumer protection: new debate on PAH restriction on all consumer goods

In June 2011, the European Commission announced that it would publish a new text to amend Annex XVII of REACH and introduce a restriction to PAHs on toys. A few months later the decision was taken to extend the scope of this measure to all consumer products.

In this context in April 2012, ETRMA took part in a public consultation launched by the Commission and underlined that any decision in this sense should be designed in such a way that it could be enforceable. ETRMA stressed that the scope of this restriction of PAHs on consumers goods should be clearly defined, as should the test method to be used to measure compliance with the new restriction.

Safety data sheets and scaling equation: co-operation with chemical suppliers

Following the 2010-2011 activities focused on developing more accurate emission factors for the tyre and rubber industry, ETRMA is now focusing in co-operating with chemical suppliers in promoting the development of standard and homogeneous safety data sheets in order to improve and facilitate the communication and reception of chemical safety information.

ETRMA is also closely working with representatives from the European Rubber Chemical Association with the aim of implementing the scaling equation concept in the Safety Data Sheet (SDS), as described in the European Chemicals Agency guidance documents. The presence of the scaling equation in the SDS will allow tyre and rubber manufacturers to adapt the safety information and related requirement to their specific scenarios of use, enhancing the health and environmental protection.

Further information can be found on ETRMA web site: www.etrma.org

CheMI platform

Established in 2003, the CheMI platform was created to represent, during the creation of REACH, the interest of those downstream users of chemicals whose major role in the supply chain is to convert substances and preparations into articles. ETRMA is one of the founding members. CheMI, representing 15 European industry associations, approximately 400,000 companies and more than 7 million employees, was reactivated in 2011 mainly to support the REACH revision, foreseen for 2012. CheMI has seats in the high level groups set up by the European Commission and ECHA; the Competent Authorities experts group (CARACAL) and the Director Contact Group (DCG). ETRMA represents CheMI in the DCG. The value of CheMI has been recognised by new industry sectors, which in 2012 decided to join the platform.

> “The proactive approach and the constantly increasing vertical and horizontal inter-sectorial co-operation are some of the key unique elements that characterise the successful way in which ETRMA operates within the European legislative framework”.
>
> *Lorenzo Zullo, Co-ordinator, Chemicals & Environment Legislation and Advocacy - ETRMA*

Classification and labelling

In December 2008 the European Parliament and the Council of Ministers adopted the new Regulation 1272/2008 on Classification, Labelling and Packaging of substances and mixtures (CLP), which aligned existing EU legislation with the United Nations Globally Harmonised System (GHS). Using internationally agreed classification criteria and labelling elements will facilitate trade and contribute towards global efforts to protect people and the environment from the hazardous effects of chemicals.

ETRMA is paying particular attention to analysing the potential effects in the supply chain of the recent substance classification notification deadline and is preparing for the 2015 notification for mixtures.

IT reporting tools with vehicle manufacturers (IMDS/GADSL)

The International Material Data System (IMDS), launched in 2000, has become a global reporting standard tool used by almost all the global original equipment manufacturers (OEMs). The system was designed to collect, maintain, analyse and archive information on materials used for automotive components. Over time it has been adapted to meet the obligations placed on automobile manufacturers, and thus on their suppliers, by national and international standards, laws and regulations, scientific findings and risk assessments, according to the Global Automotive Declarable Substance List (GADSL),

SAFERUBBER
Project objective: The project, in line with industry proactiveness on human health protection, aims to develop a new, safer, multifunctional accelerator curative molecule which can replace thiourea-based accelerators in the vulcanisation of polychloroprene rubber.
Start date: 1 June 2010
Duration: 3 years
Website: www.saferubber.eu

Project name: PROMETHEUS
Project objective: The project aims to design an integrated water treatment process to allow rubber manufacturing plants to treat waste water with high organic load and high salinity generated during manufacturing processes. This reduces environmental, gives re-usable water, and recovers costly chemicals that can be re-used in the process (demoulding agents). The implementation of the results of this project is expected to reduce waste-disposal volumes and related costs.
Start date: 1 November 2010
Duration: 2 years
Website: www.fp7-prometheus.eu

The tyre and rubber industry has been actively involved in discussions with automotive manufacturers to ensure a constant improvement of the IMDS system and a prompt GADSL update reflecting the constantly increasing worldwide chemical legislative requirement.

Workers protection: the Carcinogens Directive

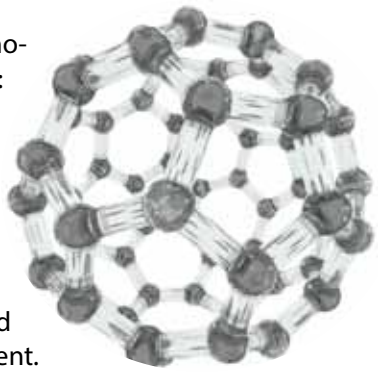
The European Commission is assessing a **potential revision of Directive 2004/37/EC** (the "Carcinogens Directive") for the inclusion of, amongst other things, "**rubber process fume and dust**" in the list of **human carcinogens** in Annex I.

ETRMA has performed a broad assessment of the appropriateness and implications of the proposed amendment to the protection of workers in the rubber manufacturing industry from the risks related to exposure to carcinogens or mutagens at work. To this end, in 2011 ETRMA commissioned two external studies to support the evaluation from both scientific and legal perspectives.

Based on the analyses and conclusions of these scientific and legal assessments, and referring to the experience of our industry, **ETRMA advocates that effective protection of workers is related to individual substances as opposed to any regulation regarding process fumes and dust as a whole.**

In particular, ETRMA emphasises the importance of enforcement and implementation of EU legislations that identify substances of concern and their associated exposure and risks. Furthermore, it underlines the need for a more accurate and transparent assessment of recent and future epidemiology studies. Finally, ETRMA thinks that internationally recognised and standardised test methods should be developed for the qualitative and quantitative assessment of the chemical species in rubber fumes, thus facilitating industry's ability to pro-actively identify and eliminate potentially hazardous components and originating raw materials.

Nanomaterials



In September 2010 ETRMA published a fact sheet on nanomaterials "REINFORCING FILLERS IN THE RUBBER INDUSTRY: Assessment as potential nanomaterials with focus on tyres". The document, which is considered a cutting-edge industry publication on this topic, describes the use (for decades) of amorphous silica and carbon black as reinforcing fillers in the rubber industry. It also explains that, in rubber industry applications, these fillers are handled in a physical form that exceeds all proposed size dimensions for nano objects and therefore do not represent a risk for humans or the environment.

The recent publication of the European Commission definition of nanomaterials, beside the already ongoing standardisation activities (CEN and ISO), has opened up a new political and legislative framework in which ETRMA will be closely involved in the coming years.

EU-funded research projects

ETRMA participates in two research consortiums that received funding from the EU in 2010. Thanks to the 7th European Framework Programme, an excellent team of experts has been able to get together in a consortium and efficiently co-operate in developing and implementing scientific knowledge in the field of chemistry. This has enhanced the creation of European intellectual networks which will potentially be able to further co-operate in the future.

Emission Trading Scheme III

On 23 January 2008, the European Commission amended the current EU Emissions Trading Scheme Directive (Directive 2003/87/EC). The major change, besides the introduction of a unique European ceiling (instead of 27 different Member States ceilings) and the introduction of a linear emissions reduction factor, is that emissions allowances will no longer be allocated for free. By means of a progressive allowance plan, they will gradually be subject to auctioning. To limit the risks of carbon leakage deriving from this legislation, the tyre industry was included in the list of sectors exposed to carbon leakage and, therefore, is entitled to a partial compensation of the direct ETS-related costs. However helpful this inclusion may have been, it does not make up for the indirect ETS costs deriving from the increase in the price of energy, which accounts for more than 50% of the total ETS costs. This results in a loss of competitiveness of European products at international level in an already dire economic climate. It is therefore regrettable that tyres were not included amongst those industries that were deemed entitled to receive further compensation at national level.

ETRMA has extensively co-operated with the EU institutions to ensure a swift and full implementation of the ETS scheme. This commitment will continue in 2012-2013 as it remains a priority area for the European Commission and for our association.

General rubber goods applications

The 'awakening' of the rubber food contact issue

Rubber food contact applications are represented by a very broad range of products that go beyond the packaging, food transportation and handling, pipes and machinery components, pumping, seals and baby feeding. The rubber industry complies with the requirements for all food contact materials laid down in Framework Regulation 1935/2004 by means of two council Resolutions: AP-2004-4 (rubber products intended to come into contact with foodstuffs) and AP-2004-5 (silicones used for food contact applications).

The EU rubber food contact industry, which operates in a non-homogeneous legislative framework, needs harmonised requirements across Europe. ETRMA is therefore closely following and supporting the current work of the European Commission and the European Food Safety Authority (EFSA) which aim to harmonise legislation on food contact materials, to ensure food safety and to ultimately lead to a proper functioning of the internal market.

Construction products and materials in contact with drinking water: towards a European Acceptance Scheme (EAS)

Construction products and products entering into contact with drinking water represent an important niche for the general rubber goods applications. While construction products are homogeneously regulated at EU level – by means of the Regulation 305/2011, which entered into force in March 2011 repealing the Construction Product Directive (89/106/EEC) – European legislative development is still required to properly regulate products entering into contact with drinking water (such as sealing, hoses, pumps, membranes and valves).
Such products are only partially covered by the Drinking Water Directive (98/83/EC) and, at European institutions level, there is no current intention to develop a European Acceptance Scheme, which will certainly help to avoid acceptance costs coming from multiple approvals and will ensure a high level of protection and consistency. ETRMA is currently monitoring the topic and in particular the ongoing international voluntary initiative of France, Germany, the Netherlands and the UK to co-ordinate the harmonisation of material and product approvals via tests and acceptance criteria.

Further information can be found on ETRMA web site: www.etrma.org

SECTION III

Enhancing consumers' responsibility for safe & sustainable transport

Consumer protection through drivers' awareness!

Mobility is the essence of the European spirit and we need cleaner, safer and more efficient transportation as this is essential for the quality of life of citizens, economic growth and consequently for employment. While legislation on the automotive industry can help achieve these targets, drivers also need to be made aware of the importance of tyres for safety reasons and to limit emissions from their vehicles.

The contribution of tyres to sustainable transport by 2050

In March 2011, the European Commission published its long-awaited White Paper on transport policy. Its objectives are to break the dependency on oil and to reduce transport greenhouse gas emissions by 60% by 2050 (compared to 1990 levels). To this end, the EU is currently proceeding to implement the 40 key initiatives it had identified as a follow-up to the White Paper.

Tyres already contribute positively to both environmental and safety objectives listed in the White Paper and new tyre technologies are available to further improve vehicle safety (e.g. winter tyres, technologies for improved wet and snow grip and for extended mobility), to effectively reduce CO_2 emissions (e.g. low rolling resistance tyres; better pressure control).

Enhancing consumers' responsibility: the power of information

> "Consumers and fleet managers will be able to choose safer and low-noise tyres and save on fuel bills while the European Union will benefit from reduced road transport emissions."
> *Andris Piebalgs, EU Energy Commissioner*

Each driver requires a different performance from his car and these performances are translated into the driving experience by the tyres - the only point of contact between the car and the road. It is for this reason that EU tyre manufacturers have been supporting the tyre-labelling project of the EU since its inception and are now looking forward to its coming into force in November 2012.

The European Tyre Labelling Regulation (EC/1222/2009) introduces labelling requirements with regard to the display of information on the fuel efficiency, wet grip and external rolling noise of tyres. Its aim is to increase the safety and the environmental and economic efficiency of road transport by promoting fuel-efficient and safe tyres with low noise levels. This regulation allows end users to make more informed choices when purchasing tyres by considering this information along with other factors normally taken into account during the purchasing decision process.

It is the hope of tyre manufacturers that labelling will help customers to become more aware of the importance of tyres in guaranteeing their safety and will therefore be more committed to tyre well-maintenance. Fuel efficiency and wet grip performances are in fact directly proportional to tyre pressure, which is the complete responsibility of the driver. However, tyre manufacturers feel that customers should be made aware that these three criteria, although important, are not the only performance parameters.

Responsibility of the producers and/or importers

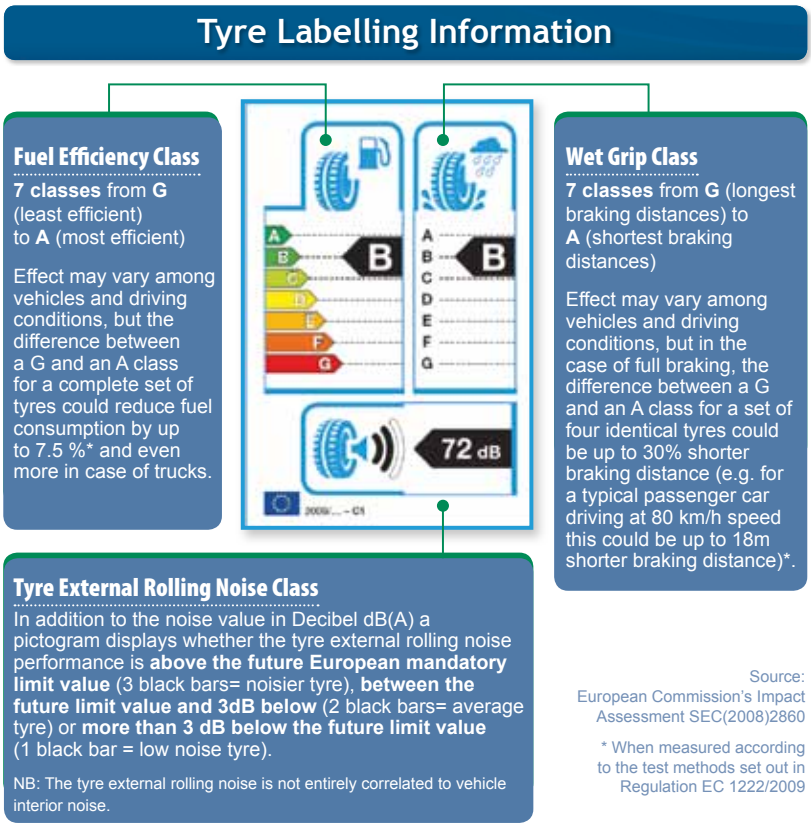
- For passenger car, light truck and truck tyres the information must be available in technical promotional literature (leaflets, brochures, etc.), including the manufacturer website.
- For passenger and light truck tyres, the manufacturers or importers have the choice of either putting a sticker on the tyre tread or a label accompanying each delivery of batch of tyres to the dealer and to the end consumer.

Responsibility of the distributors

- The tyre dealer must ensure that tyres which are visible to consumers at the point of sale carry a sticker or have a label in their close proximity which is shown to the end-user before the sale.
- Must give the information during the purchase process when the tyres offered for sale are not visible to the end-user.
- Must give the information on or with the bill.

Responsibility of the vehicle manufacturers and distributors

- Must declare the tyre wet grip and fuel efficiency class and external rolling noise measured value of the tyre type(s) that are offered in option, when different from those fitted normally on the basic vehicle.
- As soon as the customer is given a choice either in the size / type of tyres fitted on the basic rim or a choice of rim and tyre size, the labelling information must be provided before sale.
- There might be no obligation to provide information only in those cases where there is a choice of rim with tyre types and sizes that are strictly identical to those which are sold automatically with the new vehicle.



Source: European Commission's Impact Assessment SEC(2008)2860

* When measured according to the test methods set out in Regulation EC 1222/2009

Rules will apply from 1 November 2012 for all passenger car, light and heavy commercial vehicles tyres produced from 1 July 2012.

Further information can be found on ETRMA web site: www.etrma.org

Protecting consumers and promoting competitiveness: the implementation of EU Regulations on tyres

Consumer protection through effective enforcement!

Through EU legislation, the Institutions have the goal of protecting consumers as well as enhancing EU competitiveness. However, lack of clear sanctions and effective loopholes in these rules, such as the lack of post-market surveillance, undermine the competitiveness of those economic operators who do comply with the rules.

The provisions of the General Safety Regulation and Tyre Labelling regulations will become reality from November 2012. This will lead to having better tyres on European roads, but will all tyres in the market respect these new high standards?

The General Safety Regulation establishes minimum requirements for three of the many performances of tyres: wet grip, rolling resistance and rolling noise. As there are often trade-offs amongst these key performances, tyre manufacturers are now bound to compete only within certain minimum limits. This requires tyre manufactures to review their production line and the type of products and performances that they offer.

Furthermore, as said above, **tyre labelling** will not only result in consumers acquiring tyres better suited to the use that they want to make of them, but in general will make them more

committed to the tyres themselves, resulting in better maintenance, tyre pressure and attention to tread depth.

The European tyre industry has always been committed to full and timely compliance with all EU legal requirements. These EU requirements are often world-leading and enhance competitiveness, but they also generally require substantial new investment in plant and product development in order to comply with the stricter standards. Today, the EU industry's competitiveness is increasingly being undermined due to market distortion arising when non-compliant products are placed on the EU market. Such products come from manufacturers who have not invested in the necessary technological improvements and who are simply disregarding the EU law. This market distortion needs to be remedied both for consumer protection purposes and to ensure a level playing field in the EU market.

Market surveillance, the role of Member States

The German state of Rhineland-Palatinate, the UK, Italy and other EU Member States have carried out (or are planning to carry out) market surveillance exercises to test tyres on their content of PAHs and to determine whether these are compliant with EU law – see section on Health and Environment. Such action is vital to protect European consumers and to ensure that industry investments in competitiveness are not lost.

If we look at today's reality concerning national enforcement of EU laws, **the attention and resources of the national market surveillance authorities appear to be focused on only a few sectors**, such as food safety. These sectors need adequate protection, of course, but there is insufficient market surveillance and resultant enforcement action to ensure the correct functioning of the market across all sectors. In some industries this has financial implications, such as job losses. Consequently, there is an urgent need for a broader approach, for the benefit of the wider EU market and industry competitiveness. Such a broader approach is expressly mandated by EU Regulation 765/2008, which specifically requires national authorities to conduct market surveillance and enforcement activities concerning industrial goods which, inter alia, are not safe or otherwise are not compliant with the relevant EU harmonisation legislation. The requirement for national enforcement action covers both goods produced in the EU and imports from third countries, where standards may not be as strict.

It is for this reason that ETRMA welcomes the establishment of the **EU Tyre Labelling Administrative Enforcement Cooperation Committee**, which was announced in June 2012. This Committee will co-ordinate the market surveillance activities of the responsible authorities in the EU Member States and will ensure a swift and effective exchange of information with regard to tyre manufacturers applying fake or inaccurate labels.

The Department for Transport of the UK recently reported that, since its inception (3 years ago), the tyre safety campaigns have helped reduce the number of deaths on UK roads from tyre-related accidents from 44 in 2006 to 34 in 2008.

Enhancing consumers' responsibility: the contribution of the authorities

The awareness of consumers can be enhanced not just by information campaigns but through stricter roadside inspections, which should verify the sidewall type approval marking, tread depth, tyre pressure and proper fitment (summer/winter).

Better tyre checks during periodic technical inspections would also greatly contribute to drivers' perception of the importance of tyres for their safety. Unfortunately, these controls are far from being harmonised in the EU and while tread depth is widely checked, tyre pressure is checked almost nowhere and checks like tyre deformation, tyre wear/uneven wear and control of homologation differ greatly in the EU.

It is for this reason that ETRMA has been working with the EU institutions towards a standardised check list for tyre controls in the EU. This should not only include the parameters already set in the Directive 2010/48/EU, but also the following points:

- inflation pressure of tyres in accordance with the vehicle manufacturer's recommended inflation pressure and the lack or excess of inflation pressure below a certain threshold. For example, 0.5 bar below the lowest inflation specification or above the highest one must give rise to a warning on the inspection report;
- proper tyre fitment, in particular when the use of winter tyres is made mandatory by national laws;
- presence of tyre-wear indicators;
- tyre deformation;
- tyre wear/uneven wear – to be checked on the two sidewalls of tyres, not only the outboard one.

These checks should be particularly severe on two-wheelers as recent surveys showed that 20% of all motorcycles are not fitted with type-approved tyres.

Enhancing consumers' responsibility: the importance of Tyre Pressure Monitoring Systems

Given the importance of tyre pressure in guaranteeing the performances advertised on the tyre label and, in particular, its direct link with fuel consumption and safety, ETRMA has been supporting the EU in its efforts to making the fitment of accurate Tyre Pressure Monitoring Systems (TPMS) compulsory on all new vehicles. This will help drivers to keep their tyre pressure as close as possible to the recommended values. Monitoring tyre pressure should be systematic and regular as the tyre system (tyre-wheel-valve) naturally loses pressure over time.

Since the benefits of TPMS for safety and the environment have been recognised by the General Safety Regulation[1], consideration should be given to extending the obligation for TPMS in passenger vehicles to other categories of vehicles, such as light and heavy commercial vehicles.

Tyre industry surveys indicate that across the EU, no less than 65% of European cars have permanently under-inflated tyres. Driving with tyres at the right pressure is of paramount importance for vehicle safety, since only properly inflated tyres hold the load, adhere to the road, consume less fuel, produce less noise, assure the best braking distance and contribute to extending the lifetime of the tyres. Indeed, under-inflated tyres can increase fuel consumption by up to 4%, as they require extra energy to roll, while reducing tyre lifespan by 45%.[2] Having tyres at the right pressure also provides environmental benefits as it enhances the efficiency of low rolling resistance tyres, and reduces CO_2 emissions by as much as 5g for each kilometre driven.

Enhancing consumers' responsibility: control of tyre tread depth

The depth of tread is crucial for tyres. Therefore, compliance with the minimum tread depth for passenger tyres of 1.6 mm[3] is very important. **Stronger enforcement action is needed so that consumers are made aware of the serious safety risks of driving with tyres below this threshold.**

Misaligned suspension, under-inflated tyres and damage caused by potholes or riding over kerbs are the major sources of premature tyre wear and failure – and they are avoidable.

For a car travelling on tyres with a tread depth below 1,6 mm (the legal minimum), the speed at which hydroplaning starts is reduced by up to 40 %.
The braking distance from 80 km/h will increase by 13 metres with tyres having only 1,6 mm of tread depth.

[1] Regulation 661/2009/EC
[2] European Commission, Staff Working Document, SEC(2008)1908 (23.05.2008.) Annex to the Regulation of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles impact assessment
[3] Council Directive 89/459/ECC of July 1989 on the approximation of the laws of the Member States relating to the tread depth of tyres of certain categories of motor vehicles and their trailers

Top three tips for the driver

1. Check tyre pressures regularly – once a month!
2. Invest in your personal safety, your family, and of all road users: invest in tyres that meet with the requirements of the season,
3. Regularly rotate your tyres (front to back, back to front) and help prevent irregular and premature wear. You should rotate your tyres at least every 8000 km or when changing the oil.

Top three tips for public authorities

1. Harmonisation of legislation on winter tyres: road safety increases with the mandatory fitting of tyres suitable for the season's conditions. Fitting should be checked in periodic technical inspections and in roadside inspections.
2. Step up efforts to make everyone responsible through an integrated approach: vehicle technology, driver behaviour and road infrastructure,
3. Maximise the efforts to influence driver behavior by introducing joint private-public awareness programmes.

Enhancing consumers' responsibility through better information: winter tyres

Winter tyre technology is specifically developed for temperatures under 7°C in order to provide better grip and handling on cold, wet and snowy roads. This translates into better adherence/grip on snow and in a reduction of fuel consumption. Furthermore, winter tyres reduce the risk of aquaplaning thanks to their specific form, which is designed to displace the water passing under the tyre. Finally, they significantly reduce braking distances compared to summer tyres and increase safety compared to summer tyres or tyres with chains.

The EU tyre industry has worked very hard at EU level to achieve a harmonised approach to European snow tyre legislation. This work was rewarded by the EU reaching a common definition of snow tyres, which will come into force in November 2012. It is of paramount importance that this definition is implemented in all EU Member States in the hope that this will encourage further work towards harmonised legislation on the use of winter tyres.

The majority of EU Member States and candidate countries have average day temperatures at or below 7°C (a threshold at or below which it is safer to use winter tyres) from the beginning of November to the end of March[4]. Yet, only a few EU members have so far translated the need for use of winter tyres into legislation.

Obligation to use winter tyres in the EU	
Austria, Czech Republic[5], Estonia, Finland, Germany, Latvia, Lithuania, Luxembourg[6], Slovakia, Slovenia, Sweden.	**YES**
Greece, Cyprus, Malta, Portugal.	**NO**
Belgium, Bulgaria, Denmark, France, Ireland, Netherlands, Poland, Romania, UK.	**No and with average temperature in winter below 7°C**
France, Italy, Hungary, Spain.	**Partial obligation**

[4] Out of the thirty-one capitals of the EU Member States and Candidate Countries, twenty-five have average day temperature at or below 7°C during mentioned period. In the rest of the Member States, even if the average daily temperature in the capital does not fall under 7°C, it certainly does so in other regions of the country. The only exceptions are Cyprus and Malta.
[5] Regulation is currently being drafted.
[6] Mandatory from 1 October 2012.

SECTION IV
End-of-life tyres (ELTs)

Consumers benefit from a strictly enforced producer responsibility

With the development of internet tyre sales in Europe, the proportion of free-riders is rising, hence a growing number of tyres are presented for collection without having financially contributed to their recovery. This constitutes an unfair competition practice to tyre producers duly paying the eco fee and actually leads to higher collection and management costs for the ELT management company. These costs will eventually have to be transferred to the consumer.

Using the full potential of rubber recovery to reduce dependency on raw materials

Ever-spiralling energy and raw materials costs could have a positive impact on the end of life market, especially for tyre-derived products used as raw materials for recycling and/or as alternative fuel. It is therefore critical to manage that source of secondary raw materials in a sustainable way and all applications that recycle or recover rubber will help to preserve this valuable resource.

The availability of natural and synthetic rubbers may become problematic in the coming years. Shortages affecting natural rubber will in turn affect synthetic rubber. Synthetic rubber is made from fossil fuels and is therefore a non-renewable resource.

It is therefore appropriate to enhance the work being done on the recycling of vulcanized products in crude mixtures to reduce this dependence on raw materials – in particular on general rubber products which use a wide variety of polymer matrices.

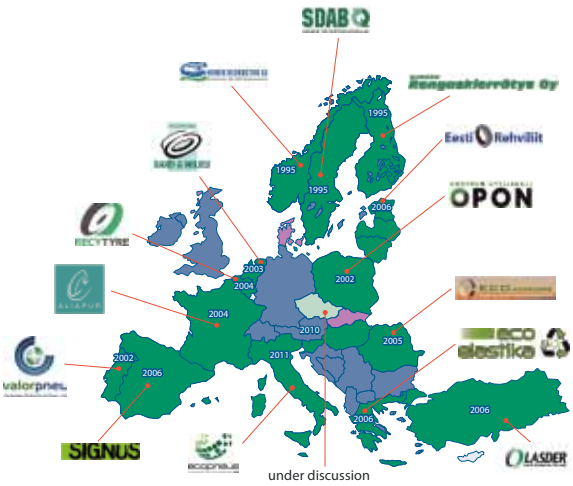
Significant improvements in resource efficiency can be met by removing bureaucratic policies regarding recycling and re-utilisation of materials and articles.

At present, end of life tyre-derived products have to be managed as waste, even if they are going to be recycled or remanufactured. The removal of the waste status for ELTs would create an estimated added value of at least €1 billion over the next decade. The waste status is a huge burden which adds significant cost over disposal and in many cases acts as a barrier to improved resource efficiency. This can be addressed in the short term via pragmatic end-of-waste criteria measures as foreseen in the revised EU Waste Framework Directive[1].

Producer responsibility prevails in the EU

The Landfill Directive (1991/31/EC) has banned the landfilling of certain ELTs since 16 July 2006. During planning for the implementation of the Landfill Directive, the tyre industry initiated a strategic programme based on producer responsibility which was developed by the members of ETRMA. This has led to the gradual creation of national ELT management companies backed by a proper statutory regime. Currently there are 16 countries with an ELT producer responsibility law and 14 ELT management companies. In Italy,

COUNTRY SPECIFIC IMPLEMENTATION AND ELT MANAGEMENT COMPANIES

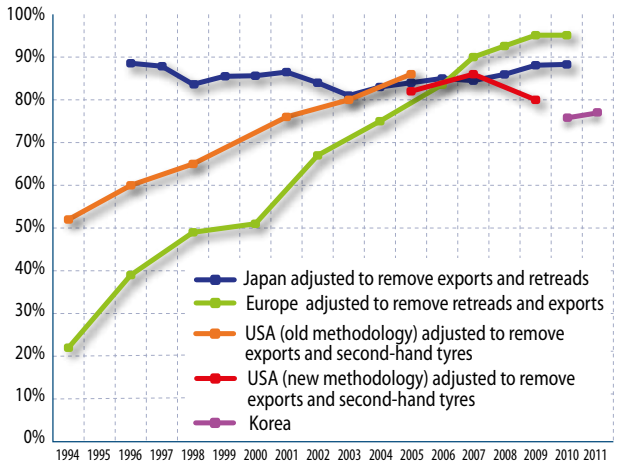


Liberal system (Free Market)
Government responsibility financed through a tax
Producer Responsibility (PR)

Source: ETRMA
www.etrma.org/tyres/ELTs/ELT-management/ELT-management-schemes

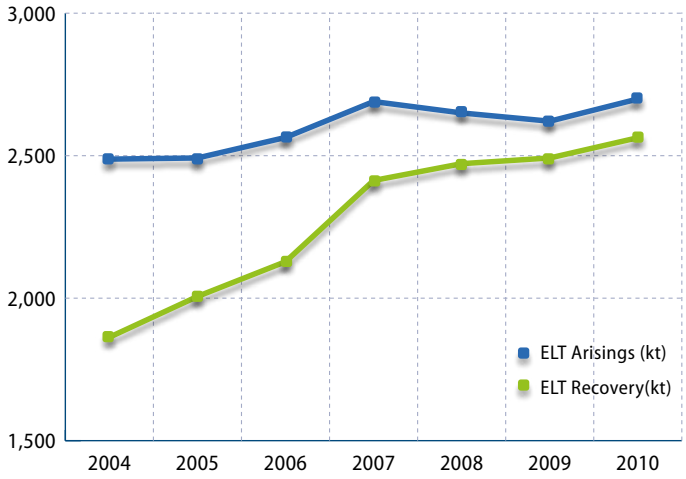
[1] EU Directive 2008/98/EC

ELT RECOVERY RATES



Evolution of ELT recovery rates in major tyre markets
Source: ETRMA, JATMA, RMA, KOTMA

EVOLUTION OF ELT RECOVERY VS ARISINGS (EU27+NO+CH)



Source: ETRMA

Ecopneus started operating from 7 September 2011 as a collective PR scheme, replacing the previous Italian free market system.

About 1.5 billion tyres are sold worldwide each year and subsequently just as many fall into the category of ELTs. Despite an increase in the service life of tyres, these volumes are constantly on the increase because of the growing number of vehicles and increasing traffic worldwide.

In Europe, around 3.3 million tonnes of used tyres are generated annually. After sorting out the data of those tyres going for reuse and retreading, an estimated 2.7 million tonnes of ELTs were left to be treated. This represents a five-fold increase of the recovered quantities over the last 18 years. This also promotes Europe as one of the most advanced regions in the world in the recycling and recovery of ELTs.

All in all, about 2.6 million tonnes of ELTs were used in a variety of recycling applications, such as synthetic turf, moulded objects etc, used in public works and civil engineering, or as a fuel substitute in cement kilns, boilers and power plants. In 2010, material recovery became the main recovery route (40% of UT arisings) followed by energy recovery (38%).

In a set geographical area (EU27+NO+CH), the recovery of ELTs increased by 38% over the last 7 years, while the ELT arising increased by 8% and the gap between the annual ELT recovery and arising decreased by 75% to about 157,000 tonnes.

End of waste status criteria for ELT derived products

The current definition of waste for ELT-derived products leads to serious administrative and financial burdens (collection, transportation, etc), which are slowing down the development of further routes of recovery. This approach contrasts with the European Union's strategy that aims to make Europe a recycling society and to encourage sustainable use of natural resources.

ETRMA is convinced that ELTs are particularly well positioned to be excluded from waste status, since they comply with end of waste criteria enshrined in the EU Waste Framework Directive:

- A market or demand for ELT derived materials exists

ELT MANAGEMENT ROUTES: MACRO ANALYSIS

	ktons in 2010	Application	Examples	%
Material recycling	1,315	civil engineering	foundation for roads and railways; embankment stabilizers; draining material, erosion barriers;	18
		product applications, steel mills, …	flooring (playgrounds, sports fields) and paving blocks, roofing materials, wheels for caddies	82
Energy	1,248	power plants, co-incineration with other waste		8
		cement kilns		92

Main uses of ELT recovery routes in 2010 – Source: ETRMA

- ELT-derived materials are commonly used for specific purposes, meet related technical requirements as well as existing legislation and standards applicable to products.

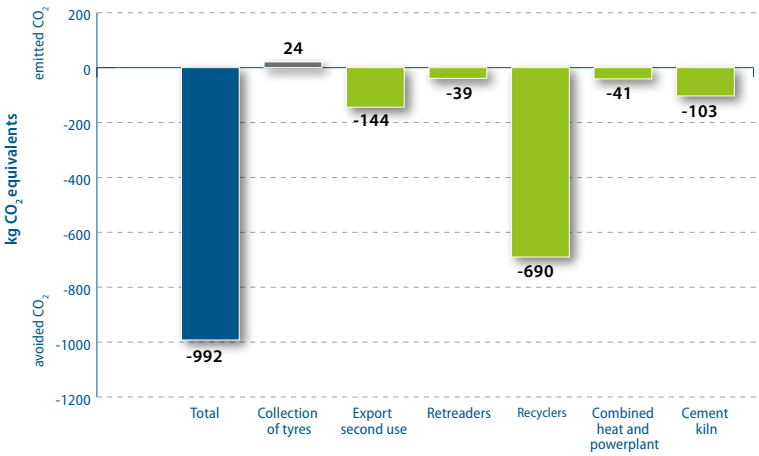
Tyres have a wide range of use in the form of powders and granulates; the main applications of which are synthetic turf, industrial floors, sport fields and children playgrounds, while equestrian floors, moulded pieces (industry & urban furniture) and anti-vibratory and insulation mats are markets in development. The use of granulates in concrete, asphalt, road paving and new compounds is a promising route but one which suffers from limitations at present.

- The use of ELT derived-materials does not lead to overall adverse environmental or human health impacts

Over the last decade, several Life Cycle Analyses (LCAs)[2] have been performed in Europe to compare the environmental impacts of different ELT recovery routes. These have provided the industry with a better knowledge of the positive contribution of replacing virgin raw materials with ELTs.

In 2011, Recybem, the Dutch ELT management company, published the results of a carbon footprint and life cycle costing study conducted by FFact on the management of passenger car tyres in the Netherlands. This showed that by processing 1 tonne of ELTs via their system the equivalent amount of CO_2 emissions are saved. The Ecotest model also tested the correlation between ecology (CO_2 footprint), recovery (resource management & preservation) and economy (costs and revenues).

CO_2 FOOTPRINT - 1 tonne passenger car tyres managed via RecyBEM/ARN



Conclusions

- By processing 1 tonne of car tyres via the RecyBEM/ARN system (mass balance 2010), 992 kg CO_2 -eq. are saved
- The emissions for collection and transport of 24 kg CO_2-eq. are easily compensated

Source: Recybem/ARN, 2011

[2] 2004 LCA on ELT recovery routes conducted by SDAB, the Swedish ELT management company, and the one of Aliapur, the French ELT management company, conducted in 2010.

"The Recybem/ARN study is adding an economic perspective to the traditional LCA approach, providing a full picture of the sustainability of ELT recovery routes."
Jean-Pierre Taverne, EU Technical Coordinator, ELTs - ETRMA

Generally speaking, LCA studies show that the benefits provided by the recovery of ELTs come from the avoidance of production and transport of certain substituted materials when the life span of ELT products is greater than that of the products they replace, as well as from the use of ELTs as energy carrier substituting conventional fuels and enabling reduced CO_2 emissions related to the ELTs biomass content.

Those studies demonstrate that almost all the recovery routes analysed provide net environmental benefits (i.e. higher impact being avoided than those generated), regardless of the environmental impact considered. Since nearly all recovery routes are environmentally beneficial, a management policy for ELTs based on the combination of all recovery methods results in environmental benefits.

In 2012, ETRMA will be promoting proposals on end of waste criteria for ELT-rubber derived products and casings suitable for retreading. ETRMA will approach the EU Commission DG Environment and the Joint Research Centre IPTS in Seville to initiate technical reports in order to eventually get end of waste status for those resources.

ELT-related standardisation

The ongoing development of quality standards for ELT-derived materials at CEN level (TC366) together with high ELT recycling and recovery performance achieved throughout Europe is a major step towards getting the end of waste status for ELT-derived products.

Furthermore, the development of EU standards contributes to a significant increase in the level of quality of tyre-derived products while opening the market to new applications, promoting technology exchanges and access to know-how and innovation, and protecting the environment.

In 2011, a new CEN Technical Committee was set up (TC366), replacing the previous Project Committee which had completed its mandate. A new Business Plan was adopted in May 2012 with the main aim of validating and converting CEN TS14243 into an EN standard.

Beyond the present characterisation of the different materials derived from end of life tyres in terms of dimensions (ELT cuts, shreds, chips, granulates and powders) and impurities (steel & textile) using harmonised methods of sampling and testing, further ELT properties will be standardised, such as physical characteristics and chemical composition.

As regards standardisation of sport surfaces (CEN TC217), the TS16384 on "synthetic sport systems leaching test" was recently approved and should be published in the 2nd half of 2012.

ETRMA has been active in promoting EU standards for ELT-derived materials since 2000 which led to the publication in May 2010 of CEN TS14243. ETRMA has been an observer in CEN TC366 (Materials obtained from ELTs) and also in CEN TC217 (Sport surfaces) since April 2011.

Fight against fraud: also benefiting consumers

With the development of internet tyre sales in Europe, the proportion of free-riders is rising which leads to a growing number of tyres being presented for collection without having financially contributed to their recovery. This constitutes an unfair competition practice to tyre producers duly paying the eco fee and actually leads to higher collection and management costs for the ELT management company, that will eventually have to be transferred to the consumer.

In France, in order to ensure a balance between suppliers, the government has imposed administrative fines on producers not respecting their regulatory obligations. After an examination of how seriously they fail to respect these obligations and the advantages they have obtained as a result, this fine can be as much as € 7,500 "per product unit manufactured, imported or distributed" - in this case, per tyre. ETRMA is launching steps at EU level to quantify this phenomenon and take corrective action to ensure all tyre producers are treated equally.

More information :
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