It’s all about competitiveness!
# Table of contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ETRMA Missions</td>
</tr>
<tr>
<td>3</td>
<td>Key Figures From 2010</td>
</tr>
<tr>
<td>4</td>
<td>Message From the President</td>
</tr>
<tr>
<td>5</td>
<td>The Secretary-General reports</td>
</tr>
<tr>
<td>6</td>
<td>Section 1 – Competitiveness</td>
</tr>
<tr>
<td></td>
<td>Market surveillance</td>
</tr>
<tr>
<td></td>
<td>Market access and trade policy</td>
</tr>
<tr>
<td></td>
<td>International harmonisation</td>
</tr>
<tr>
<td></td>
<td>Raw materials</td>
</tr>
<tr>
<td>10</td>
<td>Section 2 – Health &amp; environment</td>
</tr>
<tr>
<td></td>
<td>REACH</td>
</tr>
<tr>
<td></td>
<td>Nanomaterials</td>
</tr>
<tr>
<td></td>
<td>Classification and labelling</td>
</tr>
<tr>
<td></td>
<td>IT reporting tools with vehicle manufacturers</td>
</tr>
<tr>
<td></td>
<td>Emission Trading Scheme</td>
</tr>
<tr>
<td></td>
<td>General rubber goods applications</td>
</tr>
<tr>
<td>14</td>
<td>Section 3 – Safe &amp; sustainable transport</td>
</tr>
<tr>
<td></td>
<td>Sustainable transport by 2050</td>
</tr>
<tr>
<td></td>
<td>Consumers better informed on tyre environmental and safety performances</td>
</tr>
<tr>
<td></td>
<td>Proper use of tyres to increase safety</td>
</tr>
<tr>
<td></td>
<td>Better tyre checks during periodic technical inspections</td>
</tr>
<tr>
<td>20</td>
<td>Section 4 – End-of-life tyres (ELT)</td>
</tr>
<tr>
<td></td>
<td>European ELT producer responsibility</td>
</tr>
<tr>
<td></td>
<td>End of waste status for ELT derived products</td>
</tr>
<tr>
<td></td>
<td>ELT related standardisation</td>
</tr>
<tr>
<td></td>
<td>Fight against fraud</td>
</tr>
</tbody>
</table>
ETRMA mission

The voice 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 our members are always consulted both clearly and efficiently on any policies and regulatory issues that might affect the sector. In addition, we are fully committed to defining and communicating the common position of our members 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 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, tyre technical performance and technical regulations for tyres, rims and valves.
### Key Figures from 2010

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

#### Key 2010 data from ETRMA members in EU27 + Turkey:

<table>
<thead>
<tr>
<th>Category</th>
<th>Data</th>
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<tr>
<td><strong>Number of companies</strong></td>
<td>4200</td>
</tr>
<tr>
<td><strong>Tyre Corporate Companies</strong></td>
<td>12 Headquarters</td>
</tr>
<tr>
<td></td>
<td>91 tyre manufacturing facilities</td>
</tr>
<tr>
<td></td>
<td>15 R&amp;D Centers</td>
</tr>
<tr>
<td><strong>Direct employment</strong></td>
<td>360,000</td>
</tr>
<tr>
<td><strong>Turnover</strong></td>
<td>€46bn(e) (= +6.9%/2009) (= -6.1%/2007)</td>
</tr>
<tr>
<td><strong>ETRMA tyre members, EU 27</strong></td>
<td>€28bn(e) (= +21.7%/2009) (= +7.7%/2007)</td>
</tr>
<tr>
<td><strong>Source:</strong> ETRMA</td>
<td></td>
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<tr>
<td><strong>7 out of top 10 global tyre companies are ETRMA members,</strong></td>
<td><strong>comprising 59% of the world tyre industry turnover (2009 ranking)</strong></td>
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<tr>
<td><strong>Source:</strong> ERJ</td>
<td></td>
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<tr>
<td><strong>Tyre production</strong></td>
<td>4.5 million tonnes (= +25%/2009) (= -11.7%/2007)</td>
</tr>
<tr>
<td><strong>GRG production</strong></td>
<td>2.3 million tonnes (= +28%/2009) (= -8%/2007)</td>
</tr>
<tr>
<td><strong>Source:</strong> ETRMA</td>
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<tr>
<td><strong>Tyre replacement sales</strong></td>
<td>333.6 million units (= +29%/2009) (= -0.6%/2007)</td>
</tr>
<tr>
<td><strong>Passenger car &amp; light commercial vehicle tyres</strong></td>
<td>317 million units (= +27%/2009) (= +1%/2007)</td>
</tr>
<tr>
<td><strong>Medium &amp; heavy commercial vehicle tyres</strong></td>
<td>16.6 million units (= +66%/2009) (= -21%/2007)</td>
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<td><strong>Source:</strong> ETRMA, Eurostat</td>
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<tr>
<td><strong>Vehicle park</strong></td>
<td>275.5 million units (= +0.7%/2009)</td>
</tr>
<tr>
<td><strong>Passenger car park</strong></td>
<td>271 million units (= +0.7%/2009)</td>
</tr>
<tr>
<td><strong>Truck park</strong></td>
<td>4.5 million units (= +2%/2009)</td>
</tr>
<tr>
<td><strong>Source:</strong> LMC</td>
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<tr>
<td><strong>Exports</strong> (€)</td>
<td>+€7.9bn (= +19.7%/2009)</td>
</tr>
<tr>
<td><strong>Tyre</strong></td>
<td>+€4.0bn (= +33.3%/2009)</td>
</tr>
<tr>
<td><strong>GRG</strong></td>
<td>+€3.9bn (= +8.3%/2009)</td>
</tr>
<tr>
<td><strong>Exports</strong> (units)</td>
<td>63.8 million units (= +20.4%/2009)</td>
</tr>
<tr>
<td><strong>Tyre</strong></td>
<td></td>
</tr>
<tr>
<td><strong>GRG</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Imports</strong> (€)</td>
<td>+€8.6bn (= +19.4%/2009)</td>
</tr>
<tr>
<td><strong>Tyre</strong></td>
<td>+€5.0bn (= +19.1%/2009)</td>
</tr>
<tr>
<td><strong>GRG</strong></td>
<td>+€3.6bn (= +20%/2009)</td>
</tr>
<tr>
<td><strong>Imports</strong> (units)</td>
<td>199.3 million units (= +17.2%/2009)</td>
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<tr>
<td><strong>Tyre</strong></td>
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<tr>
<td><strong>GRG</strong></td>
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<tr>
<td><strong>R&amp;D investments in tyre companies</strong></td>
<td>Up to 3.5% of annual turnover</td>
</tr>
<tr>
<td><strong>Tyre</strong></td>
<td>Up to 5% of annual turnover</td>
</tr>
<tr>
<td><strong>GRG</strong></td>
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*estimated
*except in export/import figures
*data concern the whole EU
Message from the President

In 2010 ETRMA was invited to participate in the re-launched High Level Group of CARS 21, an official advisory Group of the Commission. The primary question of the High Level Group is ‘how can we ensure that the EU automotive industry maintains a competitive industrial manufacturing base for road vehicles?’ Evidently there is no magic wand for this. Facing the challenge, commitment is needed to remain competitive.

The challenge to access our major raw materials, to find substitutes for others, and pay increasing prices for them all; challenge to remain on the edge of development and maintain superiority in technology despite the drive of our competitors in emerging markets; the challenge to meet ever higher requirements from authorities related to safety and environmental performance of both our products and manufacturing process; the challenge to access the markets of global competitors when they increasingly resort to measures that restrict trade and the challenge to see our products take on a new life after their end-of-life situation. The latter is part and parcel of the smart and efficient use of raw materials; hence, the circle goes around and begins all over again.

In the process described above, the industry is committed to meet customer expectations, the requirements of public authorities and also the needs of its employees. We keep on investing in innovation to give consumers the highest quality products with greater performance levels – at affordable prices. We have ensured that our products confirm with the new legislation (such as REACH requirements and PAH content restriction in tyre compounds).

However, commitments must go both ways. Without the commitment from authorities, the industry is defenceless in the face of foreign tariff and non-tariff barriers; without post market surveillance, our products fight an uphill battle with imported products in our own markets; without changes in consumer attitudes, the ambitious road safety targets – ultimately ‘zero vision’ – will not be met, no matter how good tyres we produce. The key to the survival and even the development of our industries and society at large is to understand that we are all in the same boat. A healthy and competitive industry is the backbone of a healthy and competitive society.

I wish to thank all the members of ETRMA for their commitment to our association and the dedicated and effective team in Brussels, who guarantee the consistency of our powerful voice in Europe.

Francesco Gori
President
It’s all about competitiveness!

Enhancing, or at least maintaining the competitiveness of our companies, is the dominant sentiment among industry leaders. The manufacturing sector plays a highly significant role in the EU’s growth. The EU has to remain an area of high added value, be technologically advanced and host a globally competitive manufacturing sector.

Likewise, every act of legislation has an impact on industry competitiveness. The need to undertake a thorough competitiveness assessment before any regulatory initiative is launched is a fair and necessary condition – but we do not have it yet!

The cumulative effect of legislation on the manufacturers must not be underestimated – ranging from requirements on production processes [Emission Trading Scheme III], through the chemicals used [REACH], to end of life management of products [Producer Responsibility; Resource Efficient Europe].

Competitiveness is not only affected by what we do but also by what we don’t do. Proper market surveillance, or the lack of it, is a case in point. I would like to illustrate my point with an example. Over the last few years, the EU regulatory landscape for tyres alone has changed significantly, introducing more stringent requirements for safety, health and environmental purposes, and enhancing information transparency to consumers. It is not an exaggeration to say that while the EU tyre producers narrowly succeed in making technological adjustments to meet legislation coming into force, they will be confronted with more stringent requirements to be implemented in under a year! In other words, the complexity of EU legislation is increasing and is focusing especially in the environmental area, on characteristics and components which were not legislated in such a way in the past. In certain areas, EU legislation is definitely more stringent than on other continents. Test procedures to check the compliance of tyres become more specific, require highly specialised test machines, take time to obtain results and are expensive. Past conformity checks by simply looking at the tyre are not sufficient anymore.

Competitive disadvantage is also created by the fact that Europe remains one of the most open markets, while some of our global competitors in the emerging markets still have high tariff barriers and increasingly resort to several kinds of non-tariff barriers in order to hamper our access to their markets.

Competitiveness is also about fair and sustainable access to raw materials, the skills base and sufficient investment on research & development. It is about a solid financial base, security of investments, intellectual property rights and a level playing field. Recovering from the crisis in the EU while catching up with the unchecked growth in the emerging markets, 2010 put a lot of strain on the European tyre and rubber industry. ETRMA in Brussels continues to deploy the necessary steps to put forward the industry points of view, anticipating and assisting the EU institutions in their sophisticated regulatory steps.

“Likewise, every act of legislation has an impact on industry competitiveness.”

Fazilet Cinaralp
Secretary-General
Section 1
Competitiveness

“The automotive industry is crucial for Europe as an economy and as a society. We need an ambitious and comprehensive strategy to foster its competitiveness and growth worldwide while ensuring sustainability. By bringing all relevant interests to the same table we will identify policies fit for the future.”

Antonio Tajani,
Vice-President of the European Commission
and Commissioner for Industry and Entrepreneurship

Market surveillance

Competition check! Guaranteeing compliance with EU rules leads to regulatory equilibrium in the EU Single Market. Consequently, 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 European Commission has identified the re-launch of the Single Market as one of the strategic initiatives in its work programme for 2010, and the wider implementation of the market surveillance principles of the New Legislative Framework has been singled out as one of the corner stones on which this re-launch of the Single Market should be based. Within this overall policy context, the Commission envisages reviewing the automotive technical harmonisation legislation in this respect. The main objective of this review is to assess whether and to what extent the market surveillance provisions of the New Legislative Framework can be used to address the specific market failures that may be encountered in the automotive sector.

“Europe is the most highly regulated area for tyre production and marketing but our global competitors are well aware that there is no market surveillance to enforce our strict rules. This undermines equality in regulatory enforcement and at worst leads to a competitive disadvantage for European producers.”

Fazilet Cinaralp, Secretary General, ETRMA

Product safety to be aligned with the New Legislative Framework

The European Commission is undertaking a review of the General Product Safety Directive (GPSD) (2001/95/EC). The review will align the GPSD with the New Legislative Framework (NLF), Regulation 765/2008, which is in force from 1 January 2010. In the area of harmonised products the GPSD and the NLF lead to ambiguous interpretations and as a consequence the market will be fragmented, as it is up to the Member States to decide whether to apply the GPSD or the NLF. In addition the revision will introduce provisions on how and when to ban unsafe products throughout the whole of the EU once they are considered as harmful by one Member State and also on new rules in the RAPEX system.

In its October 2010 meeting, the ETRMA Board of Directors named proper market surveillance as one focus area for the coming years. As a first contribution to this objective, ETRMA launched a PAH-rich oil testing campaign, which has shown that a significant share of imported tyres do not necessarily abide by EU rules. It is not possible to tell by looking at a tyre if it conforms to the regulations so consumers are unwittingly buying illegal products on EU markets.

ETRMA is of the strong opinion that no consumer should unknowingly be confronted with the possibility of buying illegal tyres. This is a matter of the proper working of the Single Market, of consumer safety and of the competitiveness of the European industry. It is the responsibility of the EU and its Member States to protect their citizens by assuring that only legal products can be found on the market.

ETRMA urges EU and national authorities to intensify and broaden testing and enforcement activities.

PAH-oil testing programme:
154 tests were performed on 110 tyres produced under 45 different brands in 92 different plants: 11% of the tyres tested were found to be non-compliant (all of which were imported).

More information on page 10 under the section ‘REACH’.
Market access and trade policy

Market Access

ETRMA intensively fights against market access barriers. The most pressing issues in 2010-2011 were the Indian Quality Control Order and the Chinese national standards for tyres and Compulsory Certification System. 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 draft regulations of Mexico, the U.S.A, India, Korea, Ecuador, Kuwait and Oman.

In the case of India, we succeeded in getting the Indian authorities to change one discriminatory aspect in the calculation of their marking fee and postponing the implementation date for 6 months to mid-May 2011. However, severe concerns remain and by the time of the implementation date, many European companies had not been able to finalise the certification process despite their best efforts to do so.

What makes matters more sensitive is that at the same time the EU and India are in the final stages of negotiations over the Free Trade Agreement; ETRMA, although always supporting the opening up of trade, finds it hard to support an agreement which fails to tackle the outstanding non-tariff barriers, therefore threatening to eliminate possible tariff benefits for other sectors of such an agreement. No tariff benefits are foreseen for the tyre sector.

Regarding China, European and Chinese tyre and rubber industries strengthened their mutual relations by organising an industry-to-industry meeting in October 2010 in Brussels. In 2011, ETRMA and the European Commission started to prepare an Expert Round Table meeting to be held in Beijing in October-November 2011 with the aim of exchanging information and exploring possible ways for harmonisation of the technical and administrative prescriptions of tyre regulations. ETRMA also cooperated with the Commission concerning the regulatory dialogue meetings on automotive sector between the Commission and China.

New EU trade policy

On November 2010, the European Commission announced the new trade policy document of the EU: “Trade, Growth and World Affairs. Trade Policy as a Core Component of the EU’s 2020 Strategy”. Prior to the publication, the Commission organised a public consultation on a future trade policy to which ETRMA gave its contribution in August 20102.

The new policy paper is in line with the position ETRMA took in its response to the consultation. In particular, the Commission wants to make its trade policy more assertive. It also recognises that while tariffs are less and less problematic (although plenty of work remains to be done), the use of various non-tariff barriers continue to increase. The policy does contain many welcome stances - for example, that the reform of the EU’s General System of Preferences should focus on the least developed countries and that the Commission needs to push for sustainable and undistorted supply of raw materials.

While ETRMA remains committed to work actively with the European Commission to obtain our common trade goals, we also expect the Commission to determinately engage into the delivery phase according to the lines laid in the policy.

1 COM(2010)612
2 ETRMA contribution to a consultation on a future trade policy: www.etrma.org

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 created 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 the ETRMA representatives. The Group looks for practical ways of solving market access barriers.
Section 1
Competitiveness

International harmonisation

International harmonisation of technical regulations and their prescriptions is an important element to achieve a better harmonisation in global trade. This is especially true with global products, such as tyres. Therefore, a global dialogue on options to harmonise the measurement methods, standards and performance requirements, as well as a mechanism for establishing effective cooperation in practice, must be actively promoted.

The UNECE 1958 Agreement plays a key role in attaining this objective since it allows manufacturers to operate to a common set of type-approval standards, in the knowledge that the product will be recognised by the contracting parties as being in conformity with their national legislation(s).

An example of a mutually beneficial regulatory cooperation is that of the one between Indonesia and the EU; the Commission has supported Indonesian accession to the UNECE 1958 Agreement through targeted training programmes. The positive experiences and the prospects of mutually beneficial situations should be communicated to the wider ASEAN area.

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. There is also a regulatory dialogue being established with India which ETRMA deems especially important, as major obstacles remain in accessing Indian tyre market. Further dialogues would be beneficial too, for example, with ASEAN countries. Indonesia could be good initial partner due to cooperation in previous years, as would dialogue with Latin American countries.

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

Raw materials

Fair and sustainable supply of raw materials remains a challenge. This topic is here to stay. For example, price volatility in natural rubber markets and a foreseen shortage thereof, a shortage of different oils, ambitious recycling and resource-efficiency targets put forward both by industry itself and the European Commission are but a few examples.

In September 2010 ETRMA contributed to a public consultation on raw materials initiative. In the beginning of 2011, the Commission named natural rubber as one of the raw materials under the scope of the raw materials policy in its communication on commodity prices and raw materials. This will be of increasing importance as the global demand of our industry for raw materials is likely to continue or even grow given the expected increase in demand for transportation. At the next revision of the list of the critical raw materials, the challenges raised by fair supply of natural rubber should be properly assessed.

Supply shortages in some sectors may have consequences which will have effect on strategically important societal sectors such as healthcare, medical science and transport.

ETRMA also gave input to the European Parliament draft report on raw materials policy and published its own position paper highlighting the need for reducing price volatility, diversifying natural rubber sources from South East Asia, encouraging resource-efficiency measures through solutions suitable for large scale production and introducing binding disciplines against export restrictions in all trade agreements.
Price volatility

Since 2008, natural rubber market evolutions have been large, rapid and apparently not always related to the traditional supply-demand scheme. Prices evolved from 1.2$/kg in February 2009 to 6.4$/kg in February 2011. An internal recent overview regarding the key economic trends, market structure and especially the issues of financialisation/speculation, has confirmed our initial fears, inter alia, that natural rubber among a number of commodity products has experienced recent high prices and volatility and that financialisation of natural rubber and other commodity markets has had a real impact on the market. Price volatility is a significant factor undermining long term planning and thus has a negative effect on industry competitiveness.

Source diversification

Currently, over 90% of natural rubber production is located in South East Asia and sourced from three countries, operating a tripartite consortium on natural rubber since 2004. The biggest consumers of natural rubber are also situated in Asia and their cumulative consumption is expected to double in the coming decade. To guarantee fair access to and sustainable supply of natural rubber, the EU is obliged to look for alternative sources to natural rubber on the one hand and to South East Asia on the other hand, while ensuring that no monopolistic/oligopolistic structures exist on natural rubber. There is unused potential in both Latin-American and African Countries and harnessing this would also bring additional benefits, such as natural rubber exploitation, which:

- provides employment and stabilises rural populations,
- enables reforestation of barren land with a positive impact on climate and sequesters carbon dioxide from the atmosphere, and
- accelerates cash circulation and economic activities thanks to the cash payment system for natural rubber.

Fair access to raw materials

Focus on 4 cornerstones:

1. Provide the relevant tools to ensure the countries producing natural rubber are able to implement sustainable raw material policies, contributing to securing the expansion of rubber production in new areas

2. Such policies could include partnerships for direct foreign investments (private and public), through the setting up of mechanisms allowing productivity increases and inciting the take up of natural rubber production, in new as well as traditional areas.

3. Introduce binding disciplines against export restrictions in FTA and other trade agreement negotiations, especially with natural rubber producers such as Malaysia, Thailand, Indonesia, and Vietnam and address access to raw materials through bilateral discussions and other measures based on equality.

4. Encourage dialogue between producer and consumer countries in forums which can deal with topics of interest for all parties, such as the International Rubber Study Group with an enlarged mandate.

Russian Dandelion

- is a yellow flower commonly seen in many parts of Europe
- produces natural latex
- could be cultivated in large areas of Europe, including its central and northern regions
- according to recent research, in large scale cultivation, every hectare of Russian Dandelion would produce 500 to 1000 kg of natural latex per growing season

Source: www.eu-pearls.eu
REACH

Ban of high PAH oils in tyres – first REACH enforcement programme

On 1 January 2010, the use of high-PAH oils for the production of tyres was banned (REACH Annex XVII). With the aim of protecting consumers and the environment, and to ensure level playing field, ETRMA developed an extensive testing programme for checking compliance of tyres placed on the European market. The first round results of this ongoing programme were presented in Geneva on 1 March 2011 and sent to national authorities responsible for REACH enforcement. 184 tests were performed on 110 tyres produced under 45 different brands: 11% of all tyres tested were found to be non-compliant (all were imported). Through this action ETRMA is calling 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 do request confirmation from their suppliers that their tyres are fully compliant with the REACH regulation.

Further information in ETRMA web site: www.etrma.org

Competitiveness check! Health, safety and environmental regulations, necessary as they are, have an impact on industry competitiveness. The effect of cumulative legislation can be especially burdensome to European industrial sectors that are competing in global markets. ETRMA Members make every effort to comply with the EU rules and ETRMA actively co-operates with the European Commission in order to develop EU legislation that better takes into account the imperatives under which industry operates.

Developing emission factors (SPERCs)

Based on an extensive European waste water testing campaign conducted in cooperation with the chemical manufacturers, an extensive and representative set of data has been generated and used to generate new emission factors for waste water that more appropriately represent the rubber industry. These new figures represent a significant achievement for the rubber industry and help REACH registrants in particular to demonstrate safe use of chemicals in the rubber industry.

The quality and validity of this work has been recognised by an extensive assessment conducted at European level by the German Federal Ministry of Environment.

Further information in ETRMA web site: www.etrma.org

“ETRMA has documented the outcome of the evaluation in a transparent way. A scientifically sound approach had been chosen and transparent documentation is provided. It is seen as a good way of deriving emission factors and as a good practise example.”

German Federal Ministry of the Environment, UBA, April 2011

Section 2
Health & environment
Co-operation with chemical suppliers

2010 was a key year for the first REACH implementation step. This necessitated extensive cooperation with the chemical suppliers to support rubber chemical manufacturers in gathering information and data on uses of and exposure to chemicals in the rubber industry necessary to perform a correct chemical safety assessment. Key activities included support of the correct use and interpretation of generic exposure scenarios developed the previous year and the refinement of emission factors to waste water (SPERCs).

“ETRMA proactive approach has been considered at both European and global level as a very efficient way to establish and enhance a communication between downstream users and chemical manufacturers. Such a co-operative supply chain exchange in the framework of REACH, besides being very productive for the tyre and rubber industry, has been highly appreciated by all involved counterparts.”

Lorenzo Zullo, ETRMA Coordinator, Chemicals & Environment Legislation and Advocacy

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 have seats in the high level groups set by the European Commission and ECHA; the Competent Authorities experts group (CARACAL) and the Director Contact Group (DCG). Lorenzo Zullo, ETRMA Chemicals and Environment co-ordinator, represents CheMI in the DCG.

ETRMA partners in FP7 funded chemicals projects

<table>
<thead>
<tr>
<th>Project name</th>
<th>Project objective</th>
<th>Start date</th>
<th>Duration</th>
<th>Website</th>
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<tbody>
<tr>
<td>SAFERUBBER</td>
<td>to develop a new, safe, multifunctional accelerator curative molecule which can replace thiourea-based accelerators in the vulcanisation of polychloroprene rubber,</td>
<td>1 June 2010</td>
<td>3 years</td>
<td><a href="http://www.saferubber.eu">www.saferubber.eu</a></td>
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<tr>
<td>PROMETHEUS</td>
<td>to design an integrated process able to treat waste water, generated from the aluminium and rubber production process, with high organic load and high salinity, reducing pollution to the environment, obtaining re-usable water, recovering costly chemicals to be re-used in the process (demoulding agents), and reducing waste disposal volumes and related costs.</td>
<td>1 November 2010</td>
<td>2 years</td>
<td><a href="http://www.fp7-prometheus.eu">www.fp7-prometheus.eu</a></td>
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</table>
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.

ETRMA is closely monitoring the development of the European “nano” definition as well as the evolution of related legislative and standardisation activities (CEN and ISO).

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 (1 December 2010) and is preparing for the 2015 notification deadlines 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).

The tyre and rubber industry has been actively involved in discussions with automotive manufacturers to ensure that the IMDS system remains workable and that the GADSL is properly updated.

Examples of general rubber components in a car

IMDS is the official chemical reporting tool in the automotive sector accepted worldwide.
Emission Trading Scheme

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 of the introduction of a linear emissions reduction factor, is that the emissions allowances will no longer be allocated for free. By means of a progressive allowance plan, allowances will gradually be subject to auctioning.

Due to the high level trade intensity with non-EU countries, the tyre industry is a sector exposed to risk of carbon leakage (Commission Decision 2010/2/EU). Therefore, to avoid the sector being forced to move beyond the EU’s borders it is entitled to receive part of these emission allowances for free. ETRMA has been active and co-operative with the European Institutions in supporting the development of appropriate rules for allocating free allowances that take into account tyre-specific concerns, such as cross-boundary heat flows.

More than half of the ETS costs are estimated to come indirectly through the increase of electricity prices. Such costs, which affect European Member States differently depending on their energy sources, are out of the scope of the free allocation rules. The challenges to be faced by the tyre sector, considering also a possible distortion of the internal market, remains considerably high. The proper implementation of ETS remains on the ETRMA agenda as a priority topic in 2011-2012.

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 goes 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 coordinate the harmonisation of material and product approvals via tests and acceptance criteria.
Section 3
Safe & sustainable transport

“Freedom to travel is a basic right for our citizens and it is critical to the development of Europe’s business sector.”
Mr. Siim Kallas,
Vice-President of the European Commission and Commissioner for Transport

Sustainable transport by 2050

Sustainability has three pillars; social, economic and environmental, and each of these pillars has equal importance. From a social point of view, mobility is above all an important basic right, and one that needs to be protected and further enhanced. The economic aspect is about the freedom of choice and efficient use of resources. Efforts to protect environment tend to be more contributive when they are rational rather than radical.

The European Commission, in March 2011, published the long-awaited White Paper on transport policy. The White Paper deems it necessary to break the dependency on oil without sacrificing efficiency or compromising mobility. To this end it has put together a combination of 40 concrete initiatives. The strategy calls for an ambitious and visionary transport policy in the EU taking into consideration the estimated 70% growth in the transport sector by 2050. The principal goal of the policy remains reducing transport Greenhouse Gas emissions by 60% by 2050 (compared to 1990 levels).

ETRMA is committed to offering active support and is keen to contribute in a balanced and complementary way. 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; tyres for extended mobility), to effectively reduce CO2 emissions (e.g. low rolling resistance tyres; better pressure control). Not to be underestimated the role of the drivers; driver behaviour may be improved through driving license-oriented measures, stricter roadside and periodic technical inspections.

The White Paper comprises positive elements such as:

- increasing road safety; targeting close to zero road fatalities by 2050 and halving the number of road casualties by 2020
- recognising that curbing mobility is not an option
- mobility and transportation are understood to boost economic growth and create jobs
- recognition of the need for market-based solutions
- initiatives on innovative transport (public procurement, better implementation of rules, developing ITS)
- earmarking of transport revenues for the development of transport infrastructure
- reducing negative environmental impact
- promoting a more sustainable behaviour (training, driving licence, inspections)
- recognition that the race for sustainability, as well as competition in transport sector, is global

However, the policy also includes causes for concern, notably the approach to the proper interplay of modes of transport. Although the policy aims in the right direction by calling for better interplay of different modes, it casts some concern by calling for a modal shift. The problem is that forced changes in modes will not provide as easy a solution as they appear to offer because demand for the flexible solution that road transport provides will continue. Strict modal shift requirement threatens to render the already ambitious policy inoperable and, at worst, undermines many of the initiatives put forward. Resources may become distributed unequally and may favour certain modes which might hinder the development of other modes – eventually all modes need to be developed and co-operate.

Competitiveness check! The race for sustainability among operators, producers and suppliers – is global - as is competition in the transport sector. ETRMA welcomes that the recently published EU transport strategy recognises this fact. Tyres are primarily about safety and ETRMA Members remain committed to being in the forefront of developing tyre technology towards an ever safer and more environmentally sound mobility. As the race is global, European efforts must be increased to make sure that unfair competition or burdensome cumulative legislation is not preventing this endeavour.

"Freedom to travel is a basic right for our citizens and it is critical to the development of Europe’s business sector.”
Mr. Siim Kallas,
Vice-President of the European Commission and Commissioner for Transport
Consumers better informed on tyre environmental and safety performances

European tyre labelling regulation

The tyre labelling regulation 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 considered during the purchasing decision process. Customers should be made aware that the actual fuel savings and road safety depend heavily on the behaviour of drivers, in particular the following: eco-driving can significantly reduce fuel consumption, the tyre pressure needs to be correct and regularly checked for optimum fuel efficiency and wet grip performance, stopping distances should always be strictly respected. Customers should be made aware that these 3 criteria, although important, are not the only performance parameters.

Tyre Labelling Information

Obligation at point of sale, including sales website

From 1st Nov. 2012, all tyres produced after 30 June 2012 must display the following information:

1. All passenger or commercial van tyres, on display or visible by the consumer must either carry the sticker displaying the tyre label directly on their tread (as provided by the manufacturer) OR must have a copy of the tyre label (as provided by the manufacturer) in their immediate proximity.

2. Distributors must provide buyers with label fuel efficiency and wet grip classes and noise values and class of products even if not on display, before the sale.

3. The fuel efficiency and wet grip classes and noise class and values (but not the full image of the label) shall be included on the tyre technical promotional material like for example the price list, or websites.

4. Fuel Efficiency class, Wet grip class, and noise declared value have to be provided to the end consumer either on or with the bill.

6 Regulation 1222/2009/EC
Proper use of tyres to increase safety

Tyres, the sole point of contact with the road, play a crucial role in enhancing the safety of road users and of motor vehicles. Tyres are a complex and high-tech safety product representing more than 100 years of continuous manufacturing innovation. They are made up of materials that are among the very best that the metallurgical, textile and chemical industries are able to produce and there is no room for even the slightest defect in the production of these materials.

A tyre has multiple functions and must achieve a balance within a series of exacting parameters. These include supporting the load, resisting and hanging, supporting high and low speeds and perfect adhesion without generating too much rolling resistance. All this is achieved regardless of whether the ground is dry, wet, clean, irregular or deformed. Tyres, therefore, are a crucial factor behind the ability of the driver to maintain control of his/her vehicle in all conditions.

The tyre is a fundamental part of mobility and of vehicle road safety. To improve road safety, a holistic approach needs to be promoted involving these 3 fundamental action areas, which are:

- vehicle technology,
- driver behaviour, and
- road infrastructure.

Tyres can positively impact the first two areas. Unfortunately, around 100 people get killed every day on the European road network.

Monthly check of tyre pressure!

Driving with tyres at the right pressure is the most important factor, since only a properly inflated tyre holds the load, adheres to the road, consumes less fuel and produces less noise, assure the best braking distance and contribute to extending the lifetime of the tyres.

An under-inflated tyre can further put safety at risk as it may collapse and consequently cause an accident. Low tyre pressure has an extremely negative effect on tyre durability, due to excessive stress in the tyre shoulder and heat build-up from sidewall bending. 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%.

ETRMA calls for including mandatory tyre pressure checks in the Periodic Technical Inspection of vehicles!
Tyre checks in roadside inspections

When asked if we have proper tyres on our vehicles, we too often answer that we do not know – that lack of knowledge is our bottleneck. One practical solution to open up that bottleneck is through roadside inspections. Tyre checks would be quick and easily undertaken by highway police. These checks should include verification of sidewall type approval markings (which means that tyre meets the minimum requirements), tread depth, tyre pressure and proper fitment (summer/winter) – all vital for shorter braking distances. Tyre checks in roadside inspections would offer immediate benefits for road safety and encourage drivers to pay more attention to proper tyre use and maintenance.

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 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.

Check that the vehicle is fitted with proper tyres for winter conditions

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. In winter when driving conditions worsen and the risk of road accidents increases, winter tyres are the most adequate solution for safety and mobility thanks to their special design and compounds differentiating them from summer tyres.

The correct tyre together with appropriate driving behaviour for the weather conditions increases driving safety significantly.

In recent years, winters in Europe have become more snowy.

3 tips for authorities & 3 tips for drivers

Top three tips for public authorities:

1. Harmonised approach to European winter tyre legislation: Road safety increases with the mandatory fitment of tyres suitable for season’s conditions. Proper fitment 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 a joint private-public awareness programmes.

Top three 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 are made to 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 may rotate your tyres at intervals of at least 8000 km or when changing the oil.

Harmonisation of national rules becoming a necessity...

Winter tyre requirements as well as the definition of a winter tyre differ significantly amongst the national EU laws. Harmonisation of the definition, as a first step and of the requirements as a second in order to align with the EU legislation, would be highly desirable to improve EU road safety. This is the message ETRMA has put forward whether in meetings with the Vice-President and Commissioner for Transport, Mr. Siim Kallas, the Chairman of the European Parliament Transport Committee, Mr. Brian Simpson, or through giving input to the Parliament report on European road safety 2011-2020.

The majority of EU Member States and candidate countries have average day temperature 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 March9. Yet, only a few EU members have so far translated the need for use of winter tyres into legislation.

The harmonisation process is under way, through a definition update in the UNECE Regulation 117, which will introduce a minimum required level of tyre performance, with a 3 peaks mountain snowflake symbol when these tyres have successfully passed the test. This will be fully integrated into EU General Safety Regulation further amended 661/2009/EC.

Winter tyres? Yes, because they:

1. Allow better adherence/grip on snow, reduce fuel consumption and provide excellent traction, due to a specially designed tread;
2. Reduce the risk of aquaplaning thanks to their specific form, which is designed to displace the water passing under the tyre;
3. Significantly reduce braking distances compared with summer tyres; and
4. Guarantee better driving conditions and increased safety compared to summer tyres or tyres with chains.
Overview of tyre checks in Periodic Technical Inspections in Europe

Passenger car tyre tests vary a great deal in periodic technical inspections - but the same cars can drive in the whole EU area...

<table>
<thead>
<tr>
<th>Country</th>
<th>Tyre pressure</th>
<th>Tyre approval/homologation</th>
<th>Tyre wear</th>
<th>Tyre deformation</th>
<th>Load and speed indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Germany</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Finland</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>France</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Italy</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
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</tr>
<tr>
<td>United Kingdom</td>
<td>NO</td>
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<td>NO</td>
</tr>
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<td>Hungary</td>
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<td>NO</td>
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</tr>
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<td>Poland</td>
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<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Austria</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Portugal</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

Source: ETRMA

Better tyre checks during periodic technical inspections

Relating to the road safety report in the European Parliament and the Commission consultation about Periodic Technical Inspections, ETRMA examined the mandatory tyre checks contained in periodic technical inspections in 11 EU countries and found out that the tyre checks are anything but harmonised. 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.

We are missing a systematic view that tyres fitted on all vehicles in the EU meet the same criteria. From the points of view of road safety, proper working of the Single Market and the principle of free movement of people, this lack exposes weaknesses in the working of the EU.

The Directive 2010/48/EU amending the Annex II of the Directive 2009/40/EC of 6 May 2009 on roadworthiness tests for motor vehicles and their trailers, describes various checks of the condition of tyres but is unfortunately not comprehensive. For example, it is lacking a tyre pressure check although driving with tyres properly inflated is one of the most important things to do in terms of tyre maintenance and safety.

The list included in the Directive 2010/48/EU should be complemented with the following items as soon as possible:

- 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 also be made on a spare tyre where one exists. ETRMA is also in favour of the inspection of two-wheeled motorised vehicles in Europe. It would contribute to greater road safety and would help fight against fraud, such as tampered-with engines or non-compliant tyres.

In 2007, 2008 and 2009 the Highway Police in Milan checked over 5000 two-wheeler vehicles, of which 20% of motorcycles were fitted with non-homologated tyres!
Section 4
End of life tyres

Competitiveness check! Efficient use of resources, be they raw materials, energy or other forms of resource, is one of the cornerstones of any industrial process. Optimising the use of scarce resources is what makes processes sustainable and profitable. Similarly, sustainability is enhanced in society at large. ETRMA supports the EU's efforts to rationalise material use. The use of end-of-life tyre-derived products in various forms, products & applications, is an excellent case in a point, in which the European Producer Responsibility leads the way.

Ever-spiralling energy and raw material 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. For example, the tyre industry uses 70% of all natural rubber produced worldwide and estimates for the next 30 years predict that consumption will double. It is therefore critical to manage that source of secondary raw material 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. This is a huge burden, which adds significant cost over disposal and in many cases act 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.

European ELT Producer Responsibility

The Landfill Directive (1991/31/EC) has banned the landfilling of certain end-of-life tyres (ELT) since July 2006. In planning for the implementation of the Landfill Directive, the tyre industry, through ETRMA initiated a strategic programme based on producer responsibility which was proactively deployed by the members of ETRMA across Europe. This has led to the gradual creation of national end-of-life tyre management companies backed by a proper statutory regime. Currently, the network includes 15 countries, including Turkey. The latest country currently shifting towards a producer responsibility system is Italy, expected to be operational in 2011. Other EU Member States are set to follow in the near future.

Country specific implementation and ELT management companies

Unprecedented progress, in the face of growing volumes

Source: ETRMA

Source: Signus

*EU Directive 2008/98/EC
ELT recovery rate for 2009 (metric tonnes) in major markets

<table>
<thead>
<tr>
<th></th>
<th>ELT Recovery</th>
<th>ELT Arisings</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU27+CH+NO</td>
<td>2,494,000</td>
<td>2,621,000</td>
</tr>
<tr>
<td>US (2007)</td>
<td>4,105,800</td>
<td>4,595,700</td>
</tr>
<tr>
<td>Japan</td>
<td>737,000</td>
<td>814,000</td>
</tr>
</tbody>
</table>

Sources: ETRMA, JATMA, RMA

“End of life tyre-derived products have to be managed as waste, even if they are going to be recycled or remanufactured. This is a huge burden, which adds significant cost over disposal and in many cases act as a barrier to improved resource efficiency.”

Jean-Pierre Taverne,
ETRMA EU Technical Coordinator,
End of life tyres

ELTs management in Europe in 2009


![Diagram of ELTs management in Europe in 2009]

Source: ETRMA

Evolution of ELT recovery vs arisings (EU27+NO+CH)

![Graph showing evolution of ELT recovery vs arisings (EU27+NO+CH)]

Source: ETRMA
Section 4
End of life tyres

End of waste status for ELT derived products

The current definition of waste for end-of-life tyre 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 aiming to make Europe a recycling society and to encourage sustainable use of natural resources.

ETRMA is convinced that end-of-life tyres 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

<table>
<thead>
<tr>
<th>Material Recycling</th>
<th>Applications</th>
<th>Examples</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1201</td>
<td>Civil Engineering</td>
<td>Foundation for roads, Embankment stabilizers, Draining material, Erosion barriers...</td>
<td>e20%</td>
</tr>
<tr>
<td></td>
<td>Product Applications</td>
<td>Flooring (playgrounds, sports fields) and Paving blocks, Roofing materials, Wheels for caddies</td>
<td>e80%</td>
</tr>
<tr>
<td>Energy</td>
<td>Power plants, co-incineration with other waste</td>
<td></td>
<td>e3%</td>
</tr>
<tr>
<td>1293</td>
<td>Cement kilns</td>
<td></td>
<td>e97%</td>
</tr>
</tbody>
</table>

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.

As an illustration derived from a recent Aliapur study on the use of ELT granulates in Europe, 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.

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

Over the last 7 years, several Life Cycle Analyses (LCAs) have been performed in Europe to compare the environmental impacts of different ELT recovery routes, which has provided the industry with a better knowledge of the positive contribution of replacing virgin raw materials with ELTs. Generally speaking, the benefits provided by the recovery of ELTs come from of using them as substitutes for high energy-consumption materials, avoiding the 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 the biomass portion of used tyres for energy recovery.

Among relevant studies, one needs to highlight the 2004 LCA conducted by CIT Ekologik AB and IVL Swedish Environmental Research Institute Ltd on behalf of SDAB, the Swedish ELT management company, and the 2010 LCA conducted by PWC Ecobilan on behalf of Aliapur, the French ELT Management company.

Both studies demonstrate that almost all the recovery methods analysed provide net environmental benefits (i.e. higher impact being avoided than those generated), regardless of the environmental impact considered.

In both studies, results indicate that:

1) the largest benefits are associated with replacing virgin polymer with granulated used tyres in the material recycling scenario and by replacing coal as a fuel in the cement kiln with ELTs,
2) recycling does not systematically have better environmental review results than energy recovery,
3) retention basins, infiltration basins and reuse of tyres for landfill covering are recovery methods for which the advantages remain relatively minimal.

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 2010, ETRMA has taken steps towards the EU Commission DG Environment and the Joint Research Centre in Seville to initiate some technical work on end of waste criteria for end-of-life tyre derived products. ETRMA is contributing to two JRC horizontal studies on the feasibility of defining end of waste criteria for aggregates and waste derived fuels.
Section 4
End of life tyres

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 of 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.

Further to the publication in May 2010 of CEN TS14243, which aims at characterising 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.

The next step is to convert CEN PC366 into a fully fledged Technical Committee with an extended business programme in order to fully characterise other properties of ELT derived materials.

ETRMA has been active in promoting EU standards for ELT derived materials since 2000. It is an observer in CEN PC366 (Tyre Recycling) and also in CEN TC217 (Sport surfaces) since April 2011.

Fight against fraud

With the development of internet tyre sales in Europe, a growing number of tyres are presented for collection without having financially contributed to their recovery. This situation is unsustainable in the long run, as it is impossible to recover millions of tyres every year free of charge and it is unfair to transfer those costs to tyre producers duly paying the eco fee.

By way of illustration, in order to ensure a balance between producers, the French government has imposed administrative fines for producers not respecting their regulatory obligations. After 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 will be taking initiatives at EU level to quantify this phenomenon and initiate some political awareness actions to ensure all tyre producers and importers are treated equally, in countries with producer responsibility obligations.