## 02.11.2015 | MARKET Tyres & Rubber Committee: ETRMA, ETRA and BIR in a show of

## unity

"All parties expressed their awareness that co-operation between recyclers and tyre producers is needed to solve the short-, medium- and long-term problems endangering a sound economic environment for the tyre recycling industry." So said BIR Tyres Committee Chairman Ruud Burlet of Netherlands-based Rubber Resources in summarising the committee's latest gathering in Prague on October 26.

Furthermore, he added, several new opportunities for the recycling industry would be missed in the future if this level of co-operation and communication were not maintained and developed.

It was important to support the development of new markets for secondary raw materials, such as by designing mandatory "green" public procurement schemes and by granting EU-harmonised end-of-waste criteria for materials derived from end-of-life tyres (ELTs), insisted Fazilet Cinaralp, Secretary General of the European Tyre and Rubber Manufacturers' Association (ETRMA). "We need to move away from 'waste' and to become a product," she told the meeting in Prague.

The guest speaker also called for the maintenance of a balanced portfolio of possible recovery technologies and for further co-operation on standardisation activities for ELT-derived materials.

In reviewing some of the established markets for these materials, she warned of the potentially adverse impact of European regulation 1272/2013 scheduled to come into force this December. Under this legislation, it will no longer be possible to manufacture or market within the EU any consumer products with a polycyclic aromatic hydrocarbon (PAH) content above a certain threshold. According to Ms Cinaralp, the new limits would apply to the infill for artificial turf, a market that accounts for around 30% of Europe's ELT-derived granulate/powder.

Having noted that some 1.1m tonnes of Europe's ELTs goes annually into the manufacture of this infill, the speaker said of the restrictions: "We have some legitimate concerns." However, she also insisted that there were no significant health effects to be expected from playing on ELT-derived synthetic turfs/shock-absorbing surfaces.

According to fellow guest speaker Dr Valerie Shulman, Secretary General of the European Tyre Recycling Association (ETRA), some 81% of the 3.2m tonnes of tyres arising last year in the EU-28 (plus Norway) were treated "in a sustainable manner", with almost equal volumes going for material recycling as for energy recovery. The percentage was significantly lower than in 2013, mainly because of a sharp reduction in tyres channelled into retreading.

Dr Shulman went on to argue that recyclers were "disappointed" by the limited government support available in terms of finance, incentives and "green" public procurement, as well as by the significant proportion of legislation that "appears to be somewhat outdated".

Also in Prague, the pros and cons of various processing options for ELTs were evaluated by Dr Wilma Dierkes, Associate Professor of Elastomer Technology and Engineering at the University of Twente in the Netherlands. Grinding offered "rather limited" applications, she said, while pyrolysis required long residence times and high levels of investment. And she concluded: "I think we should concentrate on devulcanisation because then you can get it back into tyres."

Dr Dierkes outlined a project conducted with Dutch ELT management body RecyBEM which has focused on scaling-up the continuous devulcanisation of tyre polymer SBR in an extruder under protective atmosphere and with intensive cooling of the "devulcanizate". Results to date were "quite promising", she told delegates.