



Ruud Burlet

Advantage of recycling

In this final and concluding part of the interview (the first part appeared in the Aug/Sept issue Ruud Burlet, Tyre Committee Chairman of the Brussels-based Bureau of International Recycling (BIR), says recycling tyres has immense value not only in terms of environmental advantages but also in its use for a variety of value-added products. He vows that tyre recycling can become as successful as steel or glass recycling

TA News Bureau

Use of end-of-life tyres (ELT) as Infill in artificial turfs has been hyped and it is under constant attack. Is it safe enough to let our children play on it? Even the most thorough investigations have proven time and again that the material is safe for use. But questions about its safety keep popping up, says Ruud Burlet, Tyre Committee Chairman of the Brussels-based Bureau of International Recycling (BIR).

In an interview to Tyre Asia he said a large variety of other physical applications cannot match its use as infill in artificial turfs. In Europe, the legislators are moving to put more and more stringent safety requirements on different recycled materials. The recycling field is likely to remain turbulent.

The use of ELTs in cement kilns seems to be economical. The tyre shreds are competing with coal, although they offer only low margins. Burning solely for energy recovery is even lower on the scale of sensible recapturing of material value.

On the other side of the scale, the fluctuations in natural

rubber (NR) prices worry tyre producers' long-term strategies. Their margins vary depending on NR pricing. They, therefore, see recycling as one of the long-term options to save on raw material costs.

Burlet said many tyre companies are steadily opting for the use of recycled materials in their formulations. Some of the big brands are already using substantial amounts of recycled rubber in tyres but still shy away in publicising it as a positive green feature!

More mandatory recycling targets have to be set by tyre producers. Change the game from Push (no dumping recycling levels have to be met) to Pull (set a target for the amount of recycled material to be used into a tyre with the corresponding time set)

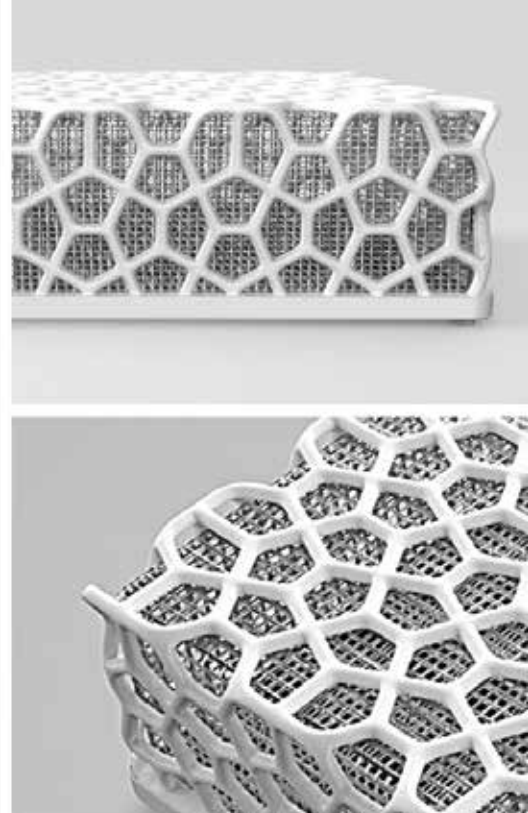
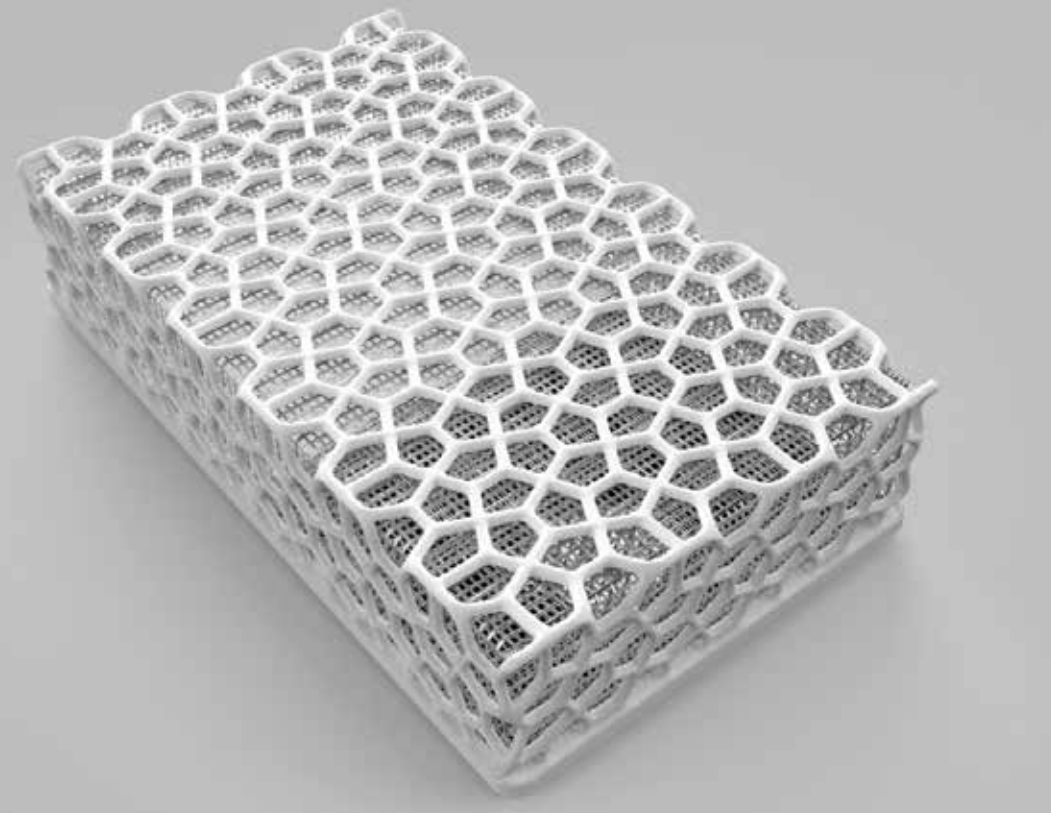
So, three strategies have to be followed. The recycling industry has to tackle technical problems due to the complexity of rubber mixtures and produce a constant stream of reclaimed or devulcanised rubber.

Standardisation will help achieve that goal to find more users. "Our company ELGI-Rubber Resources has found an option to de-vulcanise the rubber granules from truck tyre into a sensible re-usable raw material for the tyre industry. Now this also has to be achieved for car tyres," Burlet said.

Grinding ELTs into very fine powder also could be an option as US-based Lehigh Technologies has commercialised. Several research organisations such as the Twente University in The Netherlands are looking for the Holy Grail and de-vulcanise a car tyre rubber mixture back to usable raw material.

Legislation needed

The second point is the need to have legislations in place to set the goals right. More mandatory recycling targets have to be set by tyre producers. Change the game from Push (no dumping



Cooling covers made of recycled tyres (Photo courtesy: inhabitat.com)

Truck Tire Recycling Rubber Resources BV

ECORR Grade	Source	Polymer content	Density	Elongation	Tensile Strength
RNR 30 B01	Treads	53%	1130 kg/m ³	240%	>6 Mpa
RTT	Truck Tyre	58%	1160 kg/m ³	195%	>6Mpa

Final Solution !



recycling levels have to be met) to Pull (set a target for the amount of recycled material to be used into a tyre with the corresponding time set.)

And last but not least, Burlet wanted the tyre industry to use recycled materials in large scale in their formulations. This will open up massive possibilities for further research.

If these three lines of

developments can be pursued in a concerted manner, tyre recycling will become as successful as steel and glass recycling.

“One of the main problems facing the recycling industry is that they are dispersed across the world and they do not and have no strong voice. ETRA in Europe has lost its focus somewhat and other initiatives (like BIR’s) are still in a building

phase,” Burlet observed.

Only when the tyre recycling industry grows to take the emerging challenges, will it be able to influence government policies and make tyre producers realise the need to use recycled tyres in their formulations. Only then can they be seen as equal partners with the tyre industry to co-develop new uses for recycled tyres and build sustainable economies. ▲