Horizontal Ecodesign measure for internal combustion engines not feasible

The draft report on task 3 of the preparatory study for the Ecodesign Working Plan 2015-2017 also considers potential horizontal measures for Ecodesign in the future. One of the measures mentioned is a horizontal Ecodesign measure on internal combustion engines.

The European associations representing the engine manufacturers industry (Euromot), the construction machinery industry (CECE), the agricultural machinery industry (CEMA), the garden machinery (EGMF) and the material handling industry (FEM) consider a horizontal measure on internal combustion engines not feasible, inappropriate and unnecessary, and this for several reasons:

- First, contrarily to what was mentioned at the second stakeholder meeting on 29 October, the electric motors and the Ecodesign Regulation applying to this product group cannot be taken as reference point or comparison for internal combustion engines. Internal combustion engines differ greatly from electric motors, notably as they show a wide range of different types, applications and usages. This is already acknowledged by European legislation. For instance, the current proposal for a revision of Directive 97/68/EC on exhaust emissions of engines in non-road mobile machinery (NRMM) identifies 10 different types of engines, all with different test cycles and emission limits. Moreover, within the same engine category there are many differences according to the power category and fuel used. Even engines of the same type, in the same category and with the same fuel can differ substantially depending on the application and usage.

  As a result, it would not be possible to set only one energy efficiency method/standard as it is the case with electric motors. On the contrary, dozens of different test cycles and efficiency limits for each engine for each machine type would be required. Needless to say, this would make an Ecodesign measure for internal combustion engines extremely complex to both design and application.

- Second, the major environmental impacts of internal combustion engines are already regulated and two major Directives are under revision. The aforementioned NRMM Directive regulates exhaust emissions and its current revision will result in stricter limit values to be gradually introduced in 2019, 2020 and 2021. These requirements will result in significant changes in the design of the engines and the machinery they are placed in. Noise emissions are addressed by the Outdoor Noise Directive (2000/14/EC), the imminent revision of which is expected to bring acoustic power limits for more types of products with combustion engines and to require labelling of levels of acoustic power for other products. Again, this will result in significant changes in the design of the engines and the machinery they are placed in. Finally, the REACH Regulation also applies to internal combustion engines, regulating the use of hazardous substances in this equipment.

- The requirements set by these different pieces of legislation are intertwined insofar as they technically impact on each other, for both engine manufacturers and machine manufacturers (who must adapt their machines to new engines and new after-treatment devices). The two above-mentioned revisions initiated already place a heavy weight on the industry. Additional legal requirements in the short to medium term would simply be at the expense of manufacturers' competitiveness, and certainly against the objectives of the European Industrial Policy.

- Finally, energy efficiency of combustion engines is already extensively addressed by market forces. Indeed, non-road mobile machinery mainly consists of B2B equipment sold to professional users. These pay much attention to the investment and total costs of ownership, a large part of which result from fuel consumption. Therefore, engine manufacturers and machine manufacturers already make constant efforts to increase fuel efficiency of their equipment.

Conclusion

Euromot, CECE, CEMA, EGMF, and FEM strongly oppose an Ecodesign implementing measure for internal combustion engines. The variety of types and power ranges of combustion engines installed in non-road mobile machinery makes such a measure hardly feasible. The pressure imposed by other upcoming regulatory requirements on engines renders such a measure inappropriate. Finally, the importance of energy efficiency in manufacturers' R&D makes such a measure unnecessary.