

PROJECT

## DownToTen

### Measuring automotive exhaust particles down to 10 nanometres

**Funding:** European (Horizon 2020)

**Duration:** Oct 2016 - Dec 2019

**Status:** Complete

**Total project cost:** €4,135,134

**EU contribution:** €4,135,134



**Call for proposal:** H2020-GV-2016-INEA

[CORDIS RCN : 205600](#)

#### Objectives:

DownToTen will seek to develop a reliable and robust methodology to enhance the regulatory approach in the assessment of particle number emissions in the sub 23nm region (down to at least 10nm), focusing on state-of-the-art automotive powertrains with direct injection gasoline engines, but also diesel ones, under real-world operation conditions. To this end, DownToTen will first investigate and quantitatively describe the nature and the characteristics of nanoparticles

#### Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

#### Lead Organisation:

##### **Aristotelio Panepistimio Thessalonikis**

**Address:**

KEDEA BUILDING, TRITIS SEPTEMVRIOU, ARISTOTLE UNIV CAMPUS  
54636 THESSALONIKI  
Greece

**Organisation Website:**

<http://www.auth.gr>

**EU Contribution:** €856,250

#### Partner Organisations:

##### **Rheinsche Bahngessellschaft Aktiengesellschaft**

**Address:**

LIERENFELDER STRASSE 42  
40231 DUSSELDORF  
Germany

**Organisation Website:**

<http://www.ricardo.com>

**EU Contribution:** €628,284

### **Technische Universitaet Graz**

**Address:**

Rechbauerstrasse  
8010 Graz  
Austria

**Organisation Website:**

<http://www.tugraz.at>

**EU Contribution:** €698,750

### **Centro Ricerche Fiat - Societa Consortile Per Azioni**

**Address:**

Strada Torino, 50  
10043 ORBASSANO (TO)  
Italy

**Organisation Website:**

<http://www.crf.it>

**EU Contribution:** €298,250

### **Tty-Saatio**

**Address:**

Korkeakoulunkatu 10  
33720 Tampere  
Finland

**EU Contribution:** €400,000

### **Technische Universitaet Muenchen**

**Address:**

Arcisstrasse 21  
80333 MUENCHEN  
Germany

**Organisation Website:**

<http://www.tu-muenchen.de>

**EU Contribution:** €331,000

### **Avl List Gmbh**

**Address:**

Hans-List-Platz  
8020 Graz  
Austria

**Organisation Website:**

<http://www.avl.com>

**EU Contribution:** €500,350

### **European Commission - Joint Research Centre (Brussels)**

**Address:**

Rue de la Loi 200  
1049 BRUXELLES  
Belgium

**Organisation Website:**

[Organisation Website](#)

**EU Contribution:** €422,250

**Technologies:**

Emissions control systems  
Nano-particle emission measurement system

**Development phase:** Research/Invention

**STRIA Roadmaps:** Vehicle design and manufacturing

**Transport mode:** Road transport

**Transport sectors:** Passenger transport, Freight transport

**Transport policies:** Environmental/Emissions aspects, Decarbonisation

**Geo-spatial type:** Other