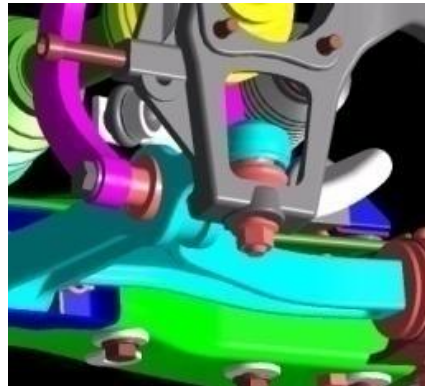
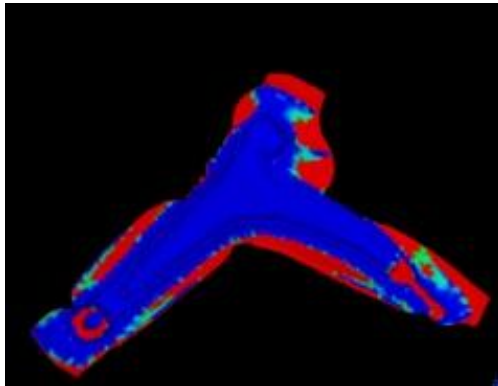
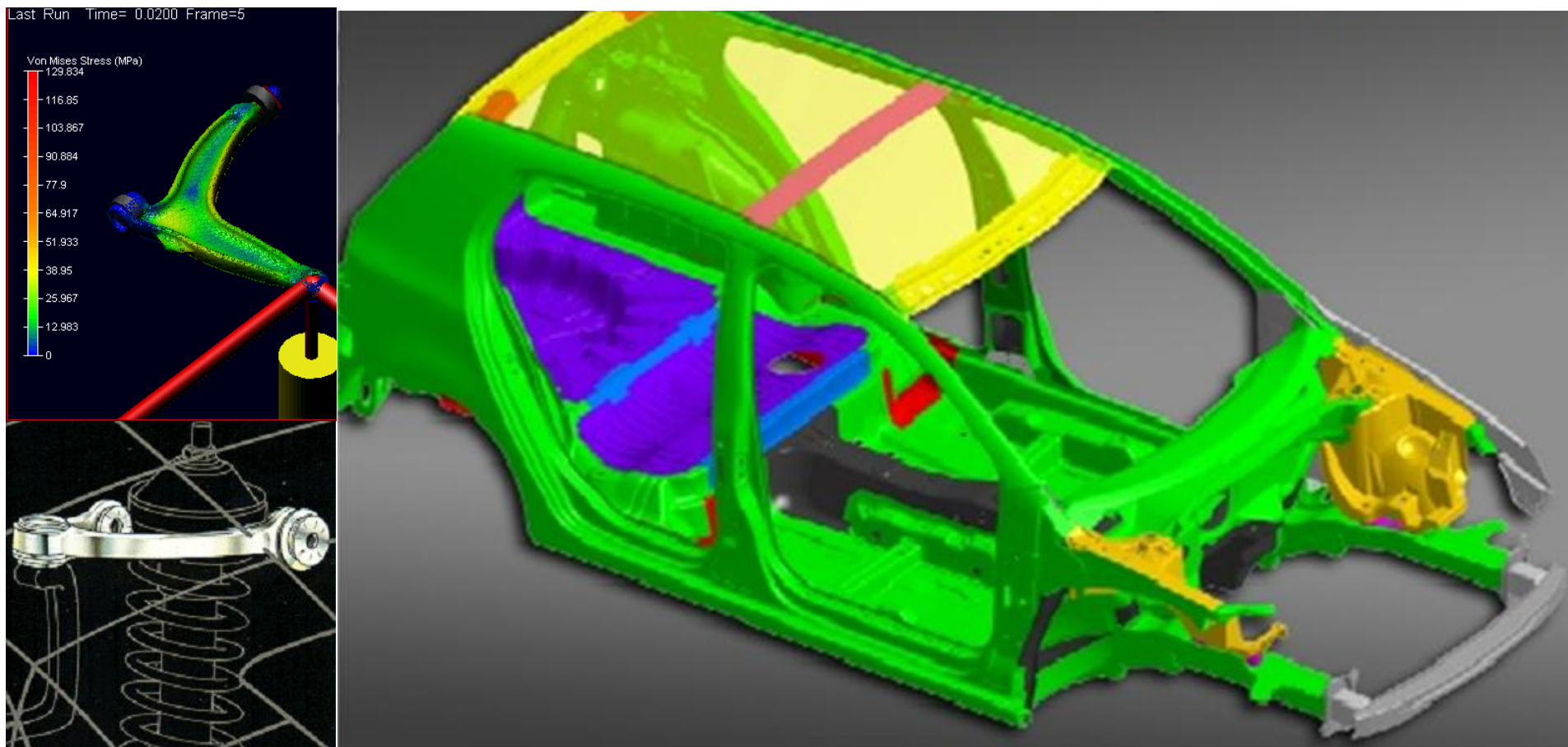


# EU FP7/NMP project: SuPLight

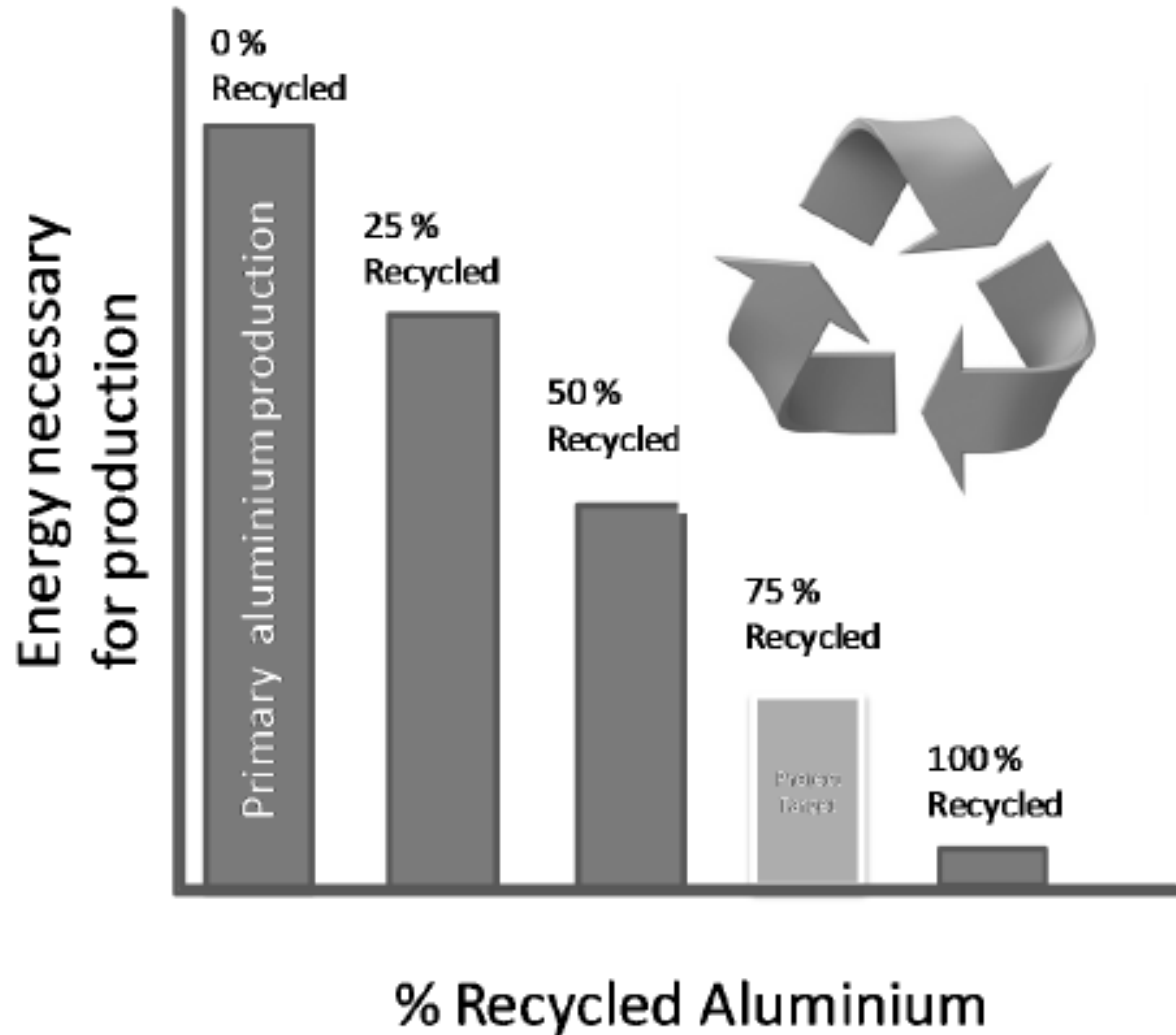
## Sustainable and Efficient Production of Lightweight Solutions



## Reduce weight and improve the holistic eco-design using aluminium wrought alloys and to build novel sustainable industry models

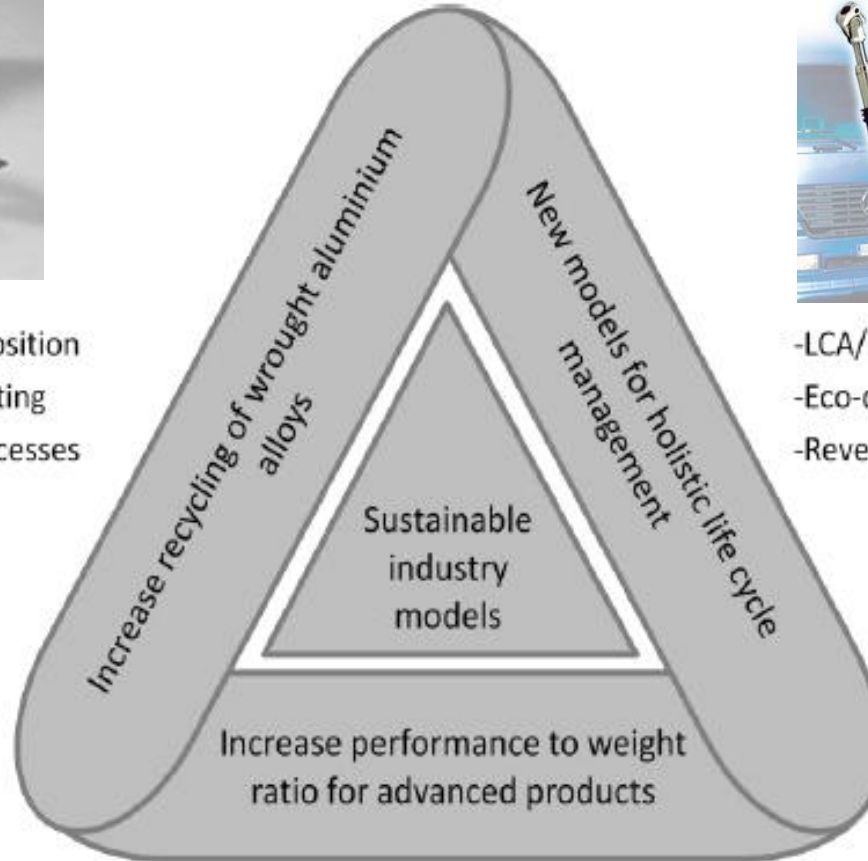


- Rationale:
  - Lightweight component and solutions increasingly important
  - Aluminium have large potentials for dramatic weight reduction
- Goals:
  - New industrial models for sustainable lightweight solutions
  - 75% recycling in high-end structural components
  - Product and process optimisation with up to 50% increased weight/performance ratio
  - Bridge from atomic-scale to continuum FEM simulations
  - Novel business models with a holistic life cycle view and higher reactivity to customer





- Alloy composition
- Process routing
- Robust processes



- LCA/LCC
- Eco-design
- Reverse logistics

- Multi-objective optimisation
- Multi-continuum simulation
- Tolerance modeling

Part. no.	Participant organisation name	Short name	Country
1 (Coord.)	SINTEF Raufoss Manufacturing AS	SINTEF RM	Norway
2	Gjøvik University College	GUC	Norway
3	Neuman Aluminium GmbH	Neuman	Austria
4	Misa AS	MISA	Norway
5	University of Stuttgart, IAT	USTUTT	Germany
6	RD&T Technology AB	RD&T	Sweden
7	EPFL	EPFL	Switzerland
8	Intercim	Intercim	France
9	Université de Technologie Compiègne	UTC	France
10	C3M d.o.o.	C3M	Slovenia
11	Hellenic Aerospace Industry	HAI	Greece
12	Norwegian University of Science and Technology	NTNU	Norway

## Potential IMS partners

- University of Michigan (Industrial Operations and Engineering, IOE), USA
- Georgia Institute of Technology (Manufacturing Research Center) in the USA
- NIST, USA
- Mexico ?
- Korea ?
  
- Advanced Industrial Science and Technology (AIST), Japan
- Shanghai University, China

