DEVELOPMENT WAYS FOR THE LIGHT POWERED TWO WHEELERS

FUNCTION AND DESIGN OF THE DIRECT INJECTION SYSTEM

SYSTEM PERFORMANCES

MIXTURE FORMATION REQUIREMENTS

ENGINE PERFORMANCES

CONCLUSIONS

TOPICS
# RAM Tuned Direct Injection

## Conditions for the GDI Adaptation for Small High-Speed Two-Stroke Engines

- Very compact combustion chamber
- Dispersed fresh air zones
- Strongly variable air flow
- Small space for injection system
- Energy on-board for the injection system
- Price of the injection system

## Results

- Reduction of consumption: \( \text{bsfc} \downarrow 35 \ldots 45\% \)
- Reduction of pollutants:
  - \( \text{HC} \downarrow \text{up to 94\%} \)
  - \( \text{CO} \downarrow \text{up to 90\%} \)
- Increase of max. torque: \( M_{\text{dmax}} \uparrow \text{up to 10\%} \)

## Conclusions