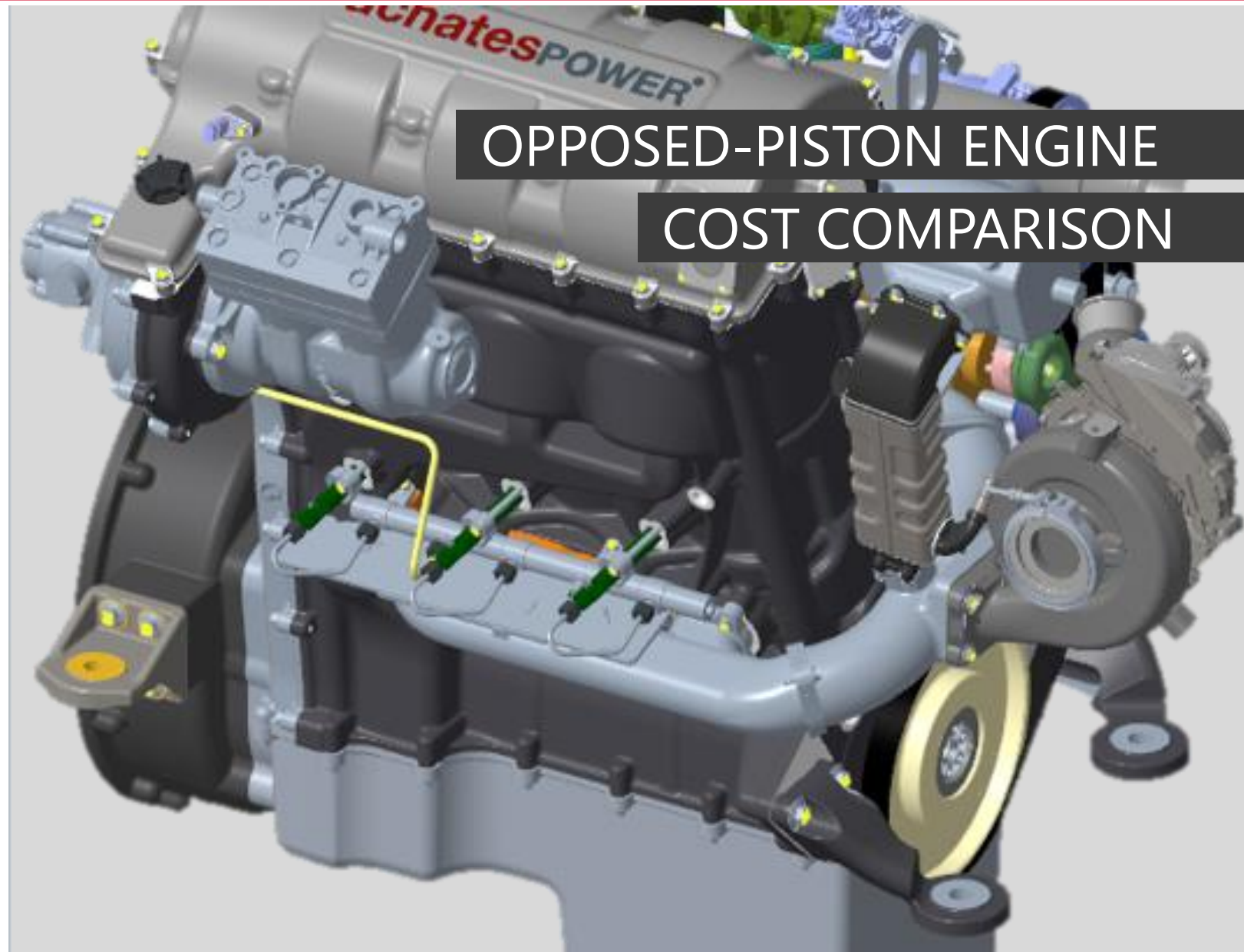


MAY 4TH, 2022
GREG KOLWICH

PREPARED FOR
**HEAVY-DUTY PROGRAM
REVIEW / CALSTART
WEBINAR**

achatesPOWER

P314920P



OPPOSED-PISTON ENGINE COST COMPARISON

AGENDA

FEV OPERATIONS AND COST ENGINEERING OVERVIEW

APPROACH AND RESULTS SUMMARY

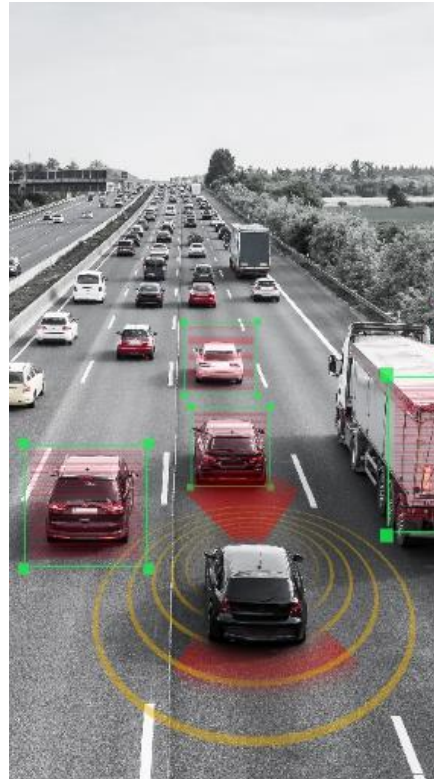
FEV offers full vehicle engineering services, originating in diesel engine design and development over 40 years ago



Vehicle
Development



Powertrain
Development &
Electrification



Intelligent
Mobility & Software



Consulting



TECHNOLOGY



STRATEGY



Software &
Testing Solutions

As part of Consulting, FEV has a strong position in Industrialization Services which includes a proven track record in Cost Engineering



FEV INDUSTRIALIZATION SERVICES

STRATEGY

DEFINING FUTURE-PROOF STRATEGIES

CONCEPT

DEVELOPING COMPETITIVE CONCEPTS

INDUSTRIALIZATION

IMPLEMENTING EFFICIENT PROCESSES

PRODUCTION

IDENTIFYING COST REDUCTION MEASURES



STRATEGIC COSTING



BENCHMARKING



PROCUREMENT & SUPPLY-CHAIN MANAGEMENT



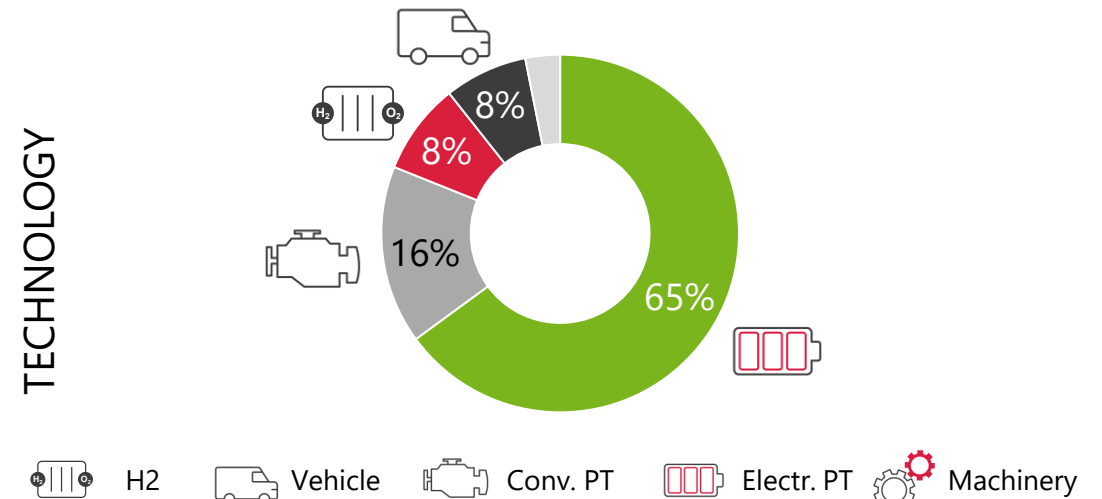
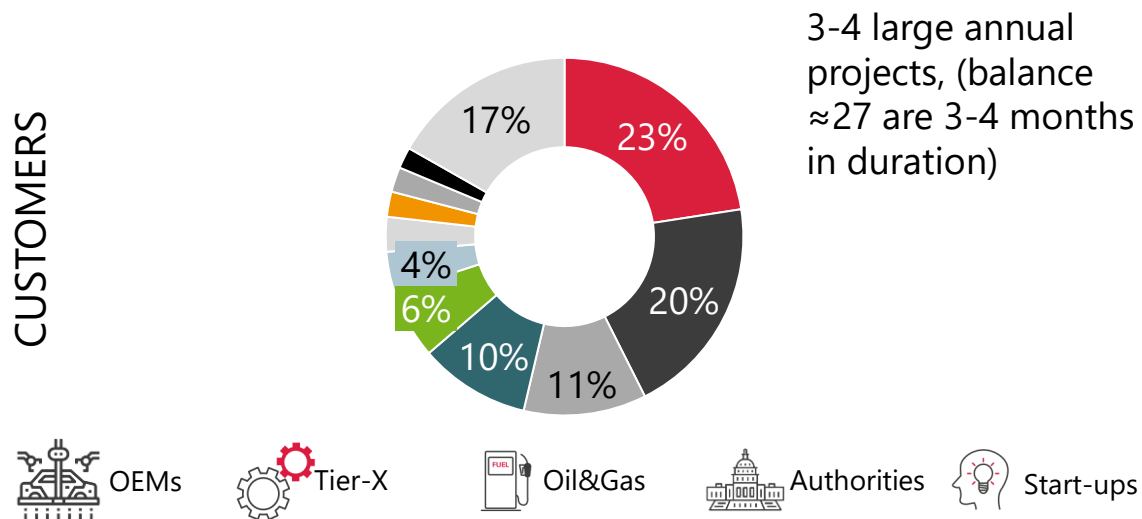
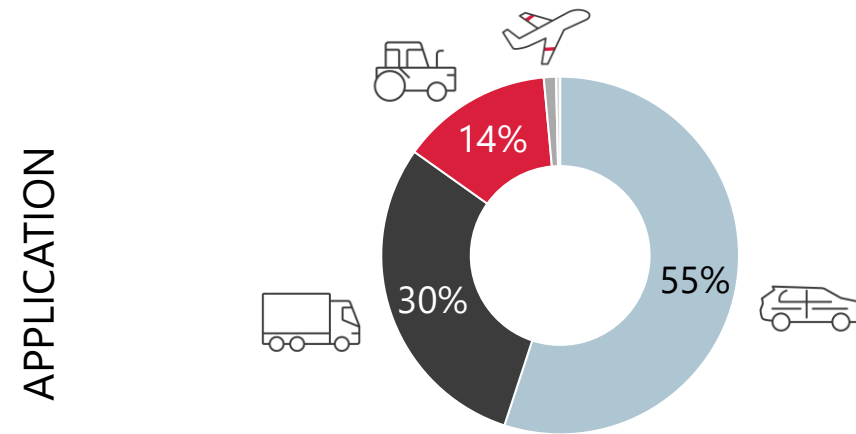
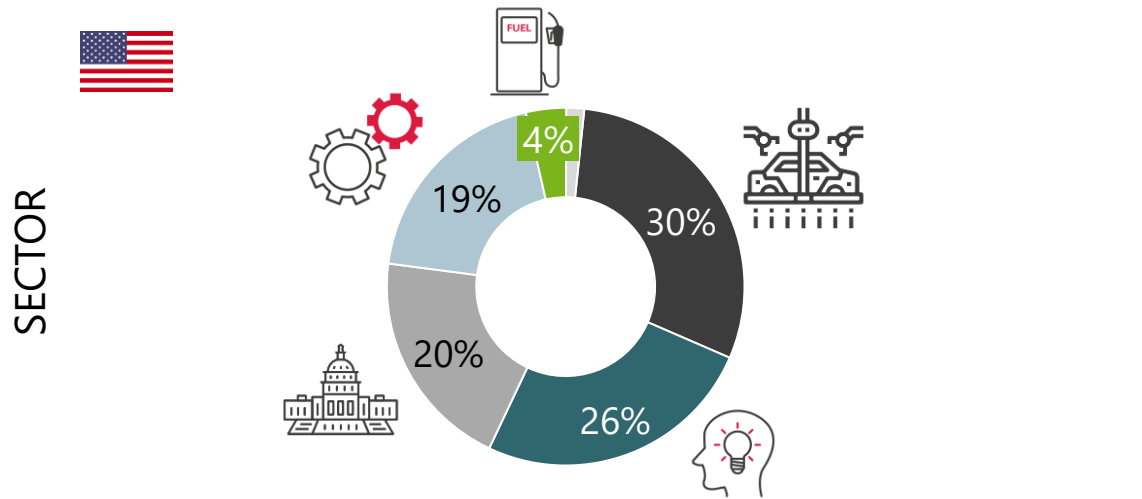
PRODUCTION PLANNING



Key client sectors are OEMs & Tier-X plus authorities and start-ups

Average 30+ different customers (50+ projects), both in Europe and US

2021 OPERATIONS SERVICES OVERVIEW



Achates Power 7.9L opposed-piston, compared to a 11L I6 4-stroke convention engine, is lower in cost by approx. 6% excluding EATs hardware

COST COMPARISON BETWEEN ENGINE SUBSYSTEMS

