QUALITY AIRCRAFT SINCE 1948

TECNAM

Alla Ricerca della Sostenibilità

Napoli, 5 Aprile 2022 – Fabio Russo

Introduzione

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Press Releases, Green, Finanza e Social Media… un calderone esplosivo!

- #AAM, #UAM, #eVTOL, #eCTOL… tags che ormai hanno invaso il web
- Necessità green, di investitori e dei social dettano tempi spesso non realistici
- Spesso da un render o un prototipo in scala si arriva addirittura in borsa
- Rischio concreto N.1: bolla speculativa
- Rischio concreto N.2: Perdita di credibilità dell'intero "nostro" settore

L’importanza della trasparenza

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Essenziale in questo periodo relativamente a:

- Notizie, annunci, comunicati stampa
- Timeline (Entrata In Servizio)
- Specifiche, incluse masse, performances ed emissioni
- Business case e Costi Operativi Diretti

Un esempio concreto di… news

…ovvero: vivere nell'epoca dei «Forward Looking Statements»

Airframers

NetJets agrees to purchase Lilium's all-electric air taxi

La notizia…

…la notizia… approfondita…

Lilium, NetJets And FlightSafety International Partner To Grow Sustainability In Private Aviation

- NetJets, the world's leading private jet company, plans to add a sustainable fleet of Lilium Jets;
- NetJets will have the right to purchase up to 150 Lilium Jets to be used within NetJets' existing shared ownership program;
- FlightSafety International, the leader in professional aviation training, is expected to cover future flight simulator and training services.

Forward Looking Statement

Many factors could cause actual future events to differ materially from the forward-looking statements in this communication, including, but not limited to, the following risks: (i) the impact of COVID-19 on the Lilium Group's business; (ii) the Lilium Group's ability to realize the anticipated benefits of its recent business combination with Qell; (iii) the Lilium Group's ability to maintain the listing of its securities on the Nasdaq; (iv) the market price of Lilium's securities may be volatile due to a variety of factors, such as changes in the competitive environment in which the Lilium Group will operate, the regulatory framework of the industry in which the Lilium Group will operate, developments in the Lilium Group's business and operations, and any future changes in its capital structure; (v) the Lilium Group's ability to implement its business plans, operating models, forecasts and other expectations and identify and realize additional business opportunities; (vi) the Lilium Group's and its partners' inability to achieve anticipated specifications for the Lilium jet and any related infrastructure; (vii) general economic downturns or general systematic changes to the industry in which the Lilium Group will operate, including a negative safety incident involving one of the Lilium Group's competitors that results in decreased demand for the Lilium Group's jets or services; (viii) the failure of the Lilium Group and its current and future business partners to successfully develop and commercialize the Lilium Group's business or significant delays in its ability to do so; (ix) the Lilium Group may never achieve or sustain profitability; (x) the Lilium Group will need to raise additional capital to execute its business plan, which may not be available on acceptable terms or at all; (xi) the Lilium Group may experience difficulties in managing its growth, moving between development phases or expanding its operations; (xii) third-party suppliers, component manufacturers or service provider partners are not able to fully and timely meet their obligations or deliver the high-level customer service that the Lilium Group's customers will expect, and impacts from disruptions in the Lilium Group's supply chains due to the COVID-19 pandemic, inflationary pressures or otherwise; (xiii) the Lilium Group's jets not performing as expected, delays in producing the Lilium Group's family of jets or delays in seeking full certification of all aspects of the Lilium Group's family of jets, causing overall delays in the anticipated time frame for the Lilium Group's commercialization and launch of any or all of the anticipated Lilium jet models; (xiv) the technology necessary to successfully operate the Lilium Group's jets and business operations is delayed, unavailable, not available at commercially anticipated prices, not sufficiently tested, not certified for passenger use or otherwise unavailable to the Lilium Group based on its current expectations and anticipated needs; (xv) any identified material weaknesses in the Lilium Group's internal control over financial reporting which, if not corrected, could adversely affect the reliability of the Lilium Group's financial reporting; (xvi) product liability lawsuits, civil or damages claims or regulatory proceedings relating to the Lilium Group's jets, technology, intellectual property or services; (xvii) the Lilium Group's inability to secure or protect its intellectual property; (xiii) any failure of the Lilium Group to agree upon final commercial terms or fail to finalize and enter into definitive documentation relating to any anticipated commercial transactions or strategic alliances with its prospective partners and suppliers, including with NetJets; (xix) that the final terms of any commercial transaction or strategic alliance with Lilium's prospective partners and suppliers, including NetJets, may differ, including materially, from the terms currently anticipated; (xx) negative publicity about the Lilium Group, its employees, directors, management, shareholders, affiliated parties or Lilium's founders; and (xxi) currency fluctuation risk related to changes in foreign currency exchange rates from time to time. The foregoing list of factors is not exhaustive. Forward-looking statements speak only as of the date they are made. You are cautioned not to put undue reliance on forward-looking statements, and the Lilium Group assumes no obligation to, and does not intend to, update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. The Lilium Group is not giving you any assurance that it will achieve its expectations. A further list and description of risks, uncertainties and other matters can be found in the section titled "Risk Factors" in our filings with the U.S. Securities and Exchange Commission ("SEC"), all of which are available at www.sec.gov. All forward-looking statements attributable to the Lilium Group or any person acting on its behalf are expressly qualified in their entirety by this cautionary statement.

La formula di Breguet

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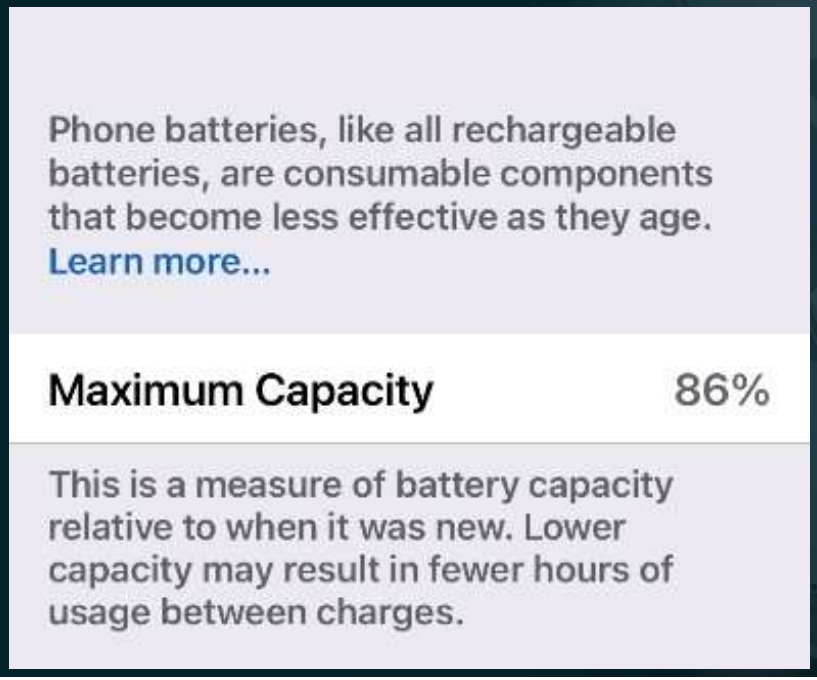
...per velivoli elettrici

$$Range_{[km]} = \frac{1}{c} \cdot \frac{L}{D} \cdot \ln \frac{W_0}{W_1} \cdot \eta_{prop}$$

$$Range_{[km]} = \frac{\delta_{batt}}{g} \cdot \frac{L}{D} \cdot \frac{W_{batt}}{W_0} \cdot (\eta_{prop} \cdot \eta_{mot} \cdot \eta_{inv} \cdot DoD \cdot SoH) \cdot 3.6$$



0,85
0,78

0,95

0,98

1,00

0,90

0,65 ÷ 0,71

La formula di Breguet

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...per velivoli elettrici

$$Range_{[km]} = \frac{\delta_{batt}}{g} \cdot \frac{L}{D} \cdot \frac{W_{batt}}{W_0} \cdot \left(\eta_{prop} \cdot \eta_{mot} \cdot \eta_{inv} \cdot DoD \cdot SoH\right) \cdot 3.6$$

250Wh/kg

135÷160Wh/kg

La formula di Breguet

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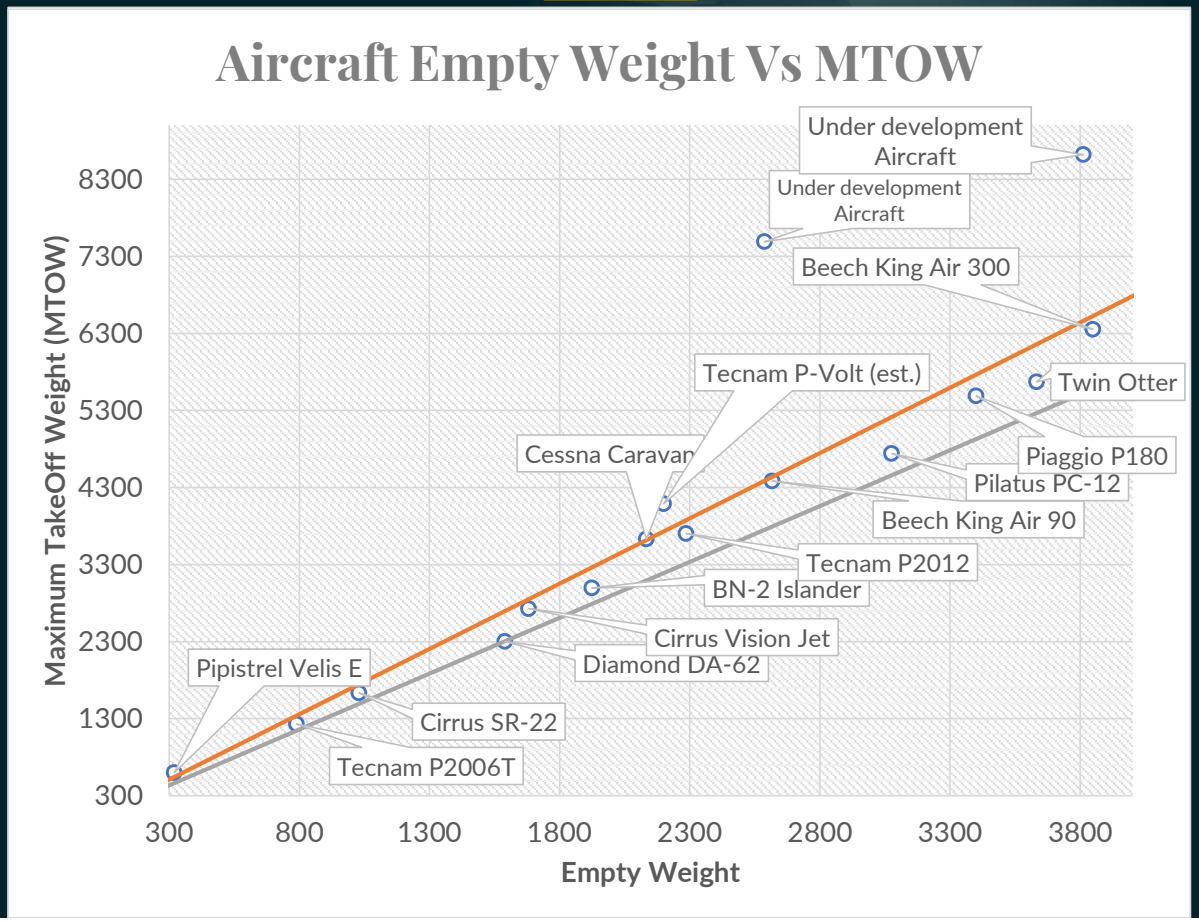
$$Range_{[km]} = \frac{\delta_{batt}}{g} \cdot \frac{L}{D} \cdot \frac{W_{batt}}{W_{TO}} \cdot \left(\eta_{prop} \cdot \eta_{mot} \cdot \eta_{inv} \cdot DoD \cdot SoH\right) \cdot 3.6$$



$$\frac{W_{batt}}{W_{TO}} = 1 - \frac{W_e}{W_{TO}} - \frac{Payload}{W_{TO}}$$

0,29

0,35

La formula di Breguet

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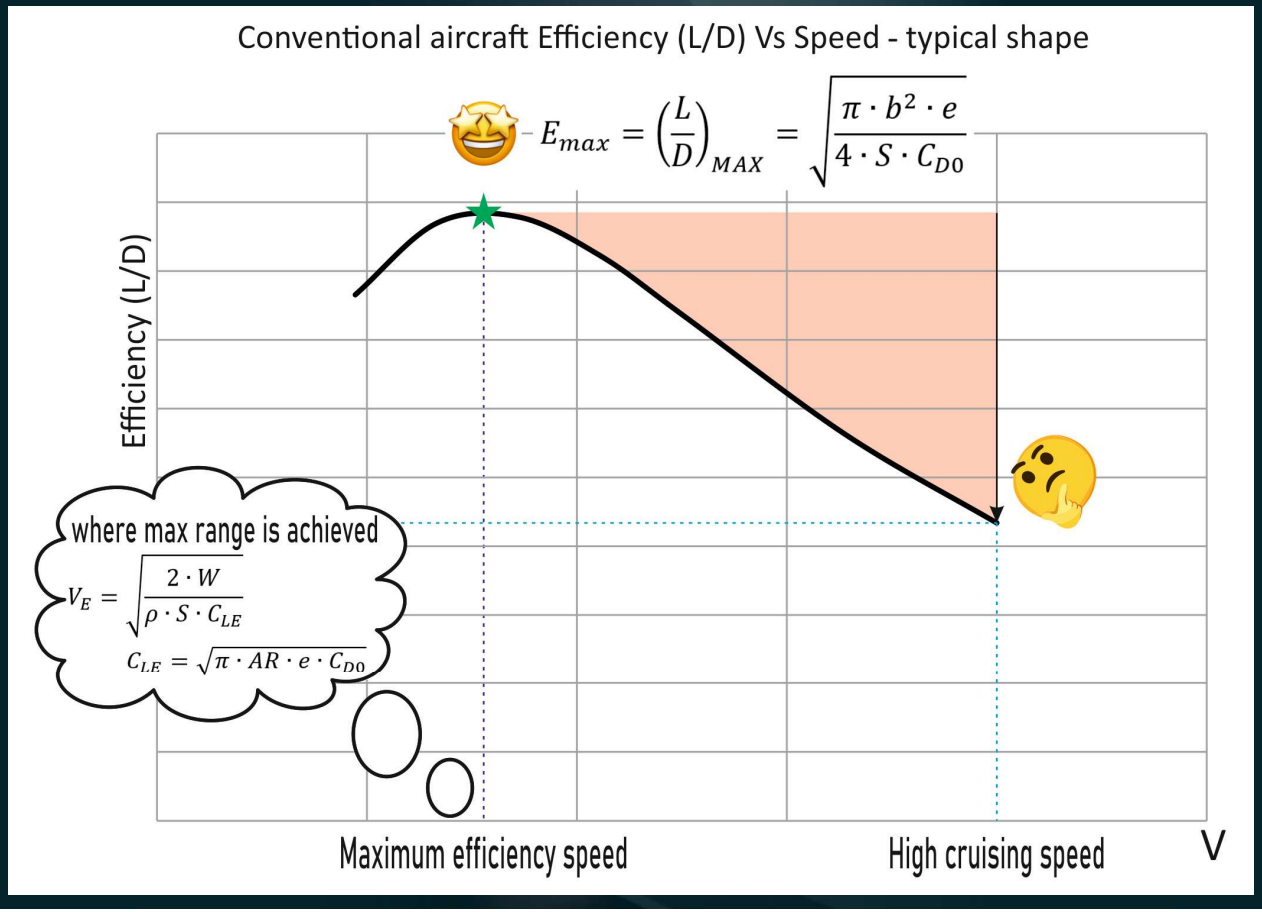
$$Range_{[km]} = \frac{\delta_{batt}}{g} \cdot \frac{L}{D} \cdot \frac{W_{batt}}{W_0} \cdot \left(\eta_{prop} \cdot \eta_{mot} \cdot \eta_{inv} \cdot DoD \cdot SoH\right) \cdot 3.6$$



La formula di Breguet

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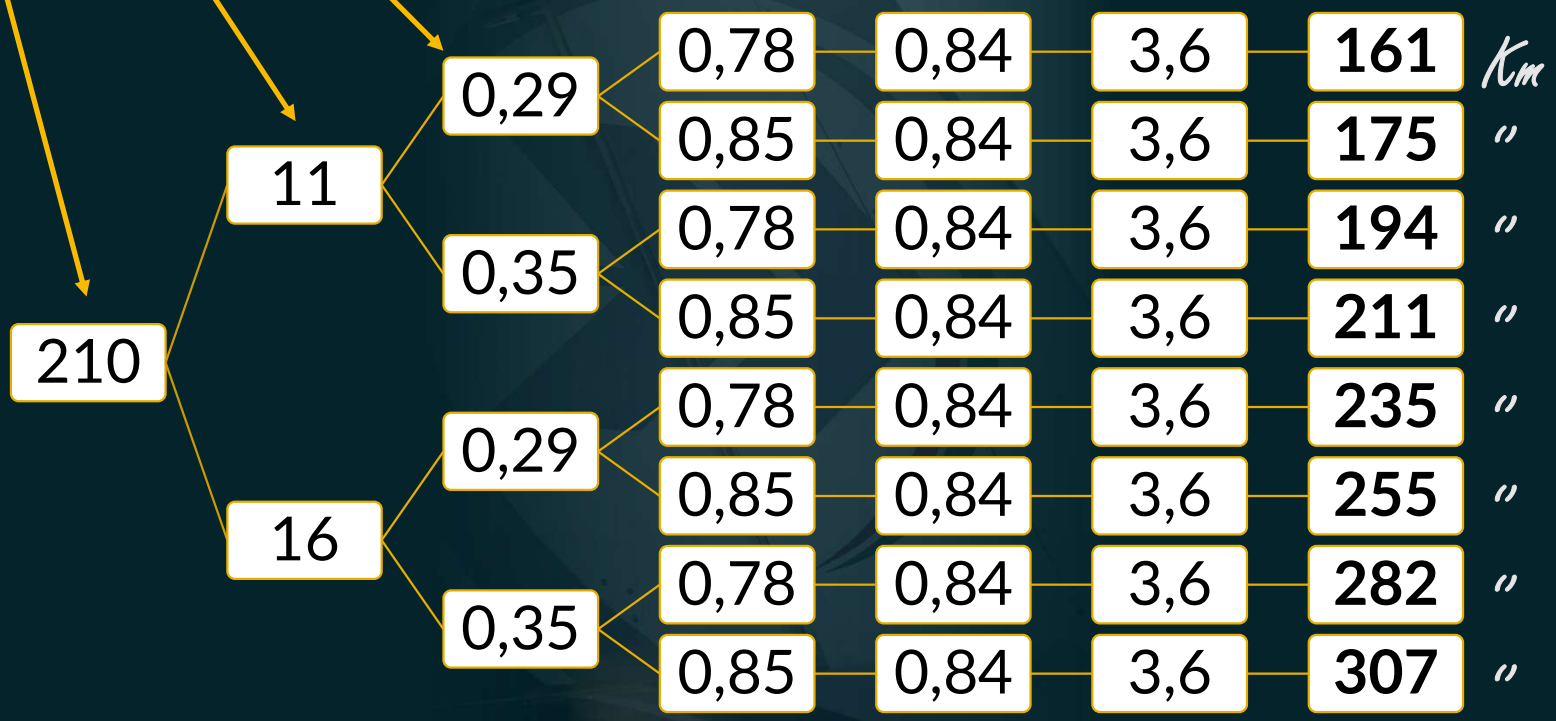
$$\frac{\delta_{batt}}{g} \cdot \frac{L}{D} \cdot \frac{W_{batt}}{W_0} \cdot \left(\eta_{prop} \cdot \underbrace{\eta_{mot} \cdot \eta_{inv} \cdot DoD \cdot SoH}_{0{,}84}\right) \cdot 3.6 =$$



Automobile si, Aereo “forse”… Perchè?

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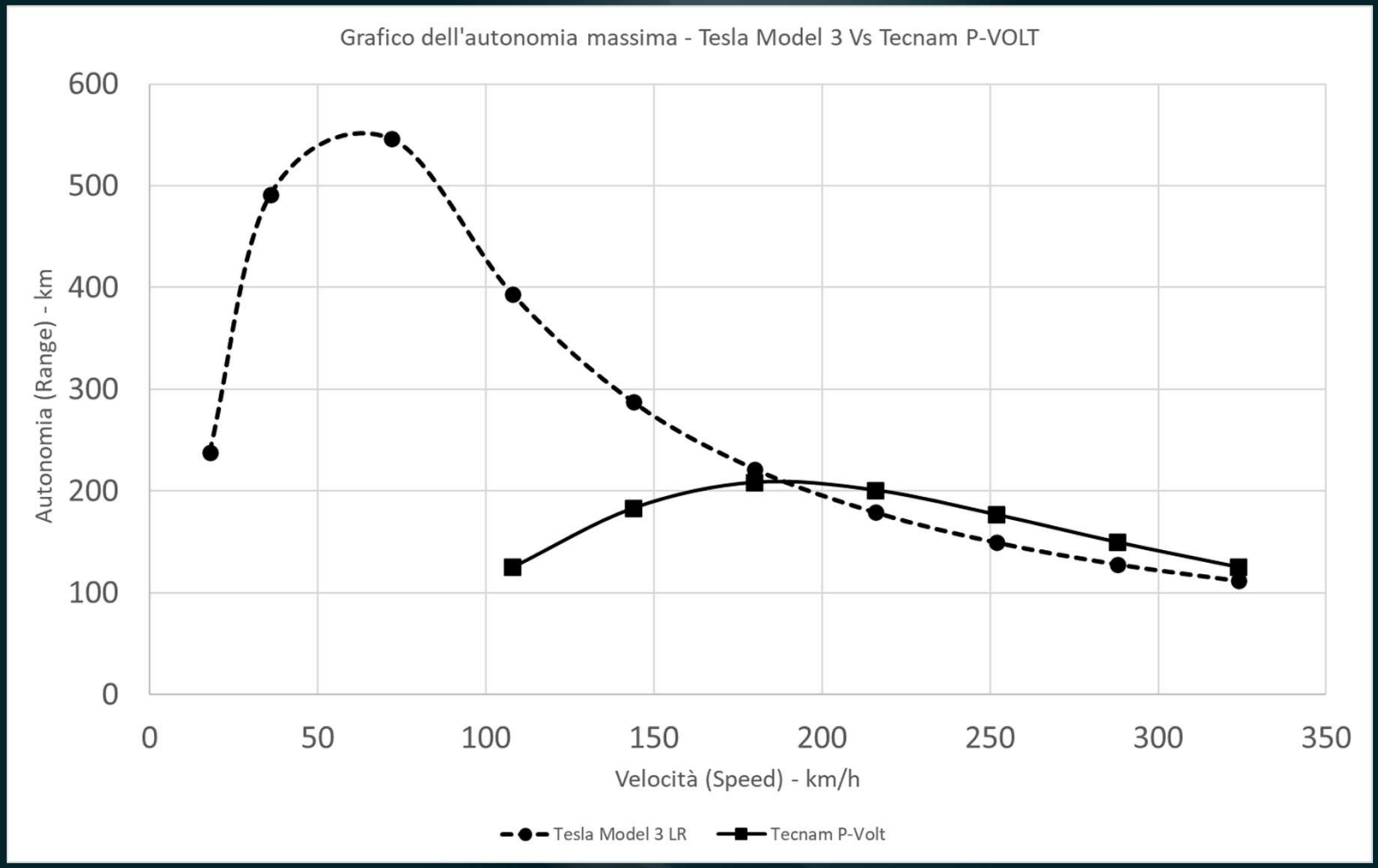

L’impatto ambientale di un velivolo elettrico

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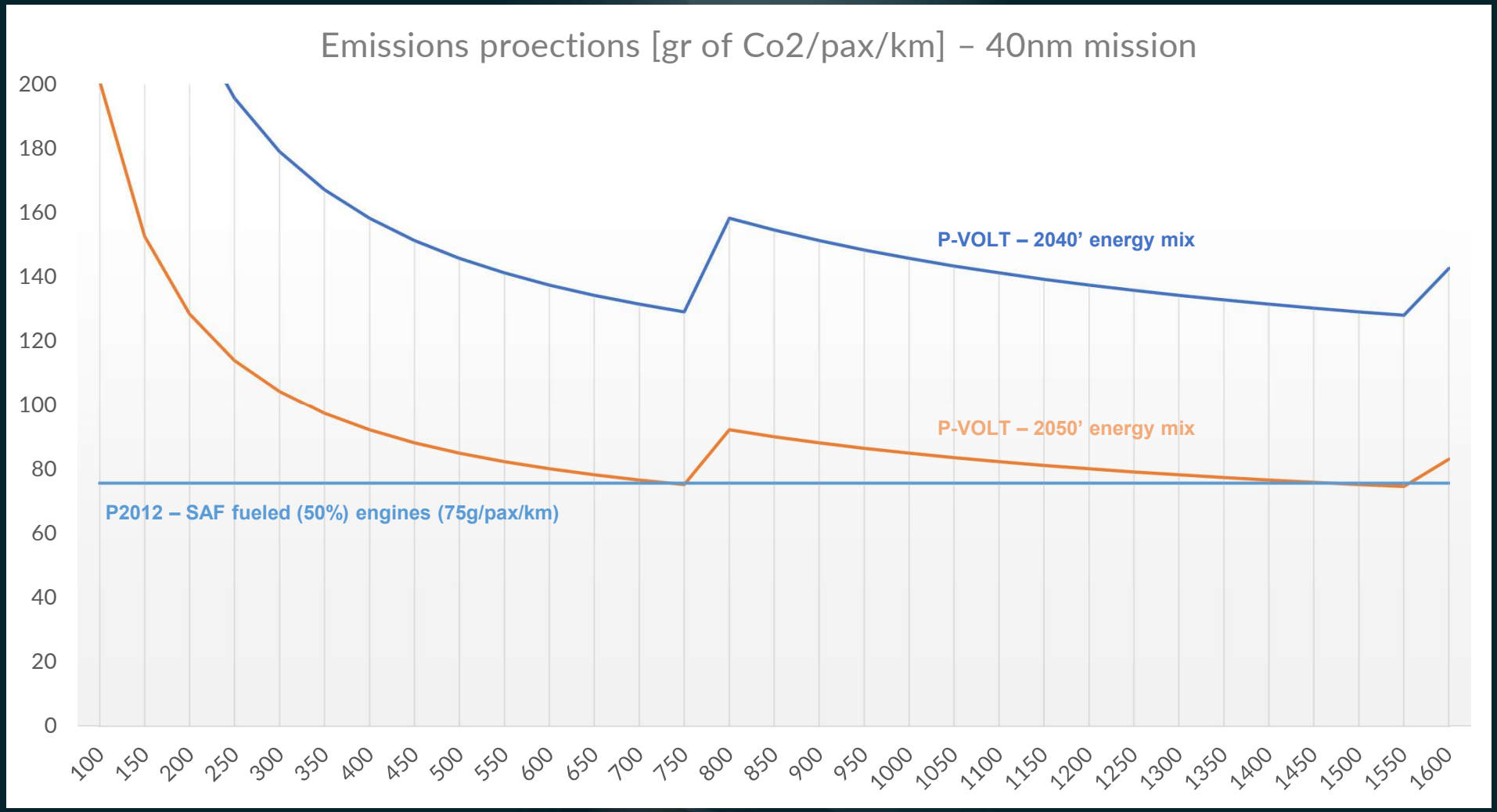

Tecnam R&D projects

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Projects that enhance the transition offering the most realistic and flexible testbeds!

H3PS

hybrid, no weight penalty

Even if just a technology demonstrator, this is the first time a parallel hybrid flown on a GA aircraft demonstrating huge reduction of emissions thanks to the ultra-efficient Rotax baseline

X-57

ambassador of DEP

Distributed Propulsion has its forerunner, and NASA selected the Tecnam P2006T as baseline airframe due to its being the most efficient twin engine in the world!

P-VOLT

where «e» meets reality

Probably the first-time real concepts about electric aviation met customers: realistic technology evaluation, costs, performances are the baseline of P-VOLT concept

un ultimo pensiero…

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Thank You
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