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MINING THE FUTURE™ SCHEDULE AND PLAN

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Synthesis of the challenge-based competition

- Much of the expected 9 million cubic metres of FCC excavated materials is molasse
 - Heterogeneous sedimentary material
- The **effort to increase the re-use** of excavated materials is **anchored in the applicable laws**
- **The challenge:** There exists no market-ready innovative (product or service) re-use pathway for this material today
- **Goal of the innovation competition: Identify technologies and processes that help reducing the amount of materials that will have to be disposed in landfills and that can be application ready by 2030**



Molasse in the FCC area,
M. Haas (DOI 10.1007/s00501-020-01026-6)

Multi state international competition

Stage 1 (7 months, March - September 2021)

- Advertisement of the competition international scale
 - in social media
 - Web pages of specific engineering societies
 - Domain specific mailing lists
 - Selected print media
- Application to participate on web page
 - Summary material of molasse characteristics
 - Participation conditions
 - Submission form with initial proposal descriptions
- Initial screening of submissions by Jury
 - After initial screening for credible submissions supply more detailed molasse material analysis results with the retained participants

Stage 2 (9 months, October 2021 – July 2022)

- Jury reviews with selected candidates on a Q&A interactive basis the proposals according to different criteria
 - Project relevance (compatibility with expected molasse material)
 - Technical feasibility
 - Practical demonstration at proof-of-concept level
 - Technological readiness assessment for 2030
 - Economic viability
 - Societal value
- Final selection of a winner by the jury
- Information of winner and award event in 2022

Competition closing event and award ceremony in Leoben (Austria) in October 2022

Information to be provided to applicants

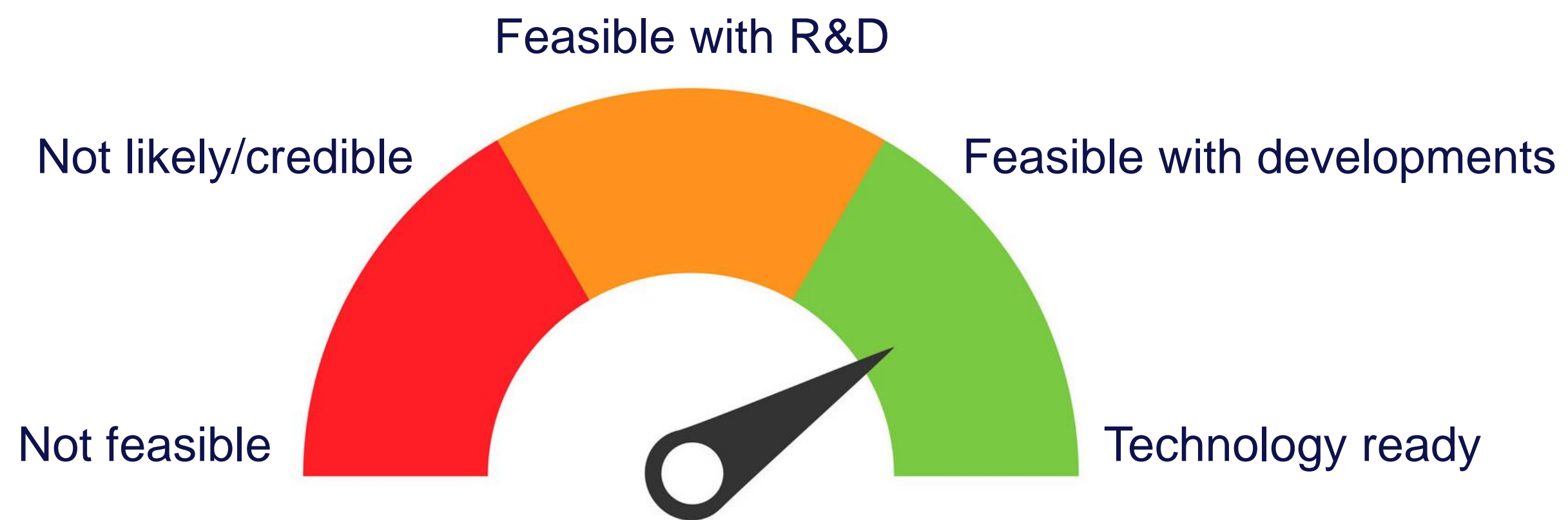
- Brief **description of the FCC project**
- High-level overview of the **collider placement**
 - Since the placement must remain adjustable until the end of the environmental evaluation and debat public processes, the applicants will receive a “placement class” based information that indicates the area within the colider would be located
- Explanation of the technological readiness level scale and expectation of the readiness level aiming for a technology to be ready at industrial scale by 2030
- General information about the **geology** and geotechnical conditions along the tunnel alignment
- Overview of the expected **quantities** of different soil types (e.g. molasse, limestone)
- General **description of the molasse** based on literature and available data samples with ranges of the characteristics (the “data set”)
- **Raw data of selected molasse samples**, since ultimately the applicants are responsible for the interpretation of the materials and the indication of feasibility of the proposed approaches
- Applicants will receive a questionnaire about their initial proposal that also foresees the possibility to protect their existing IP

Who can participate?

- **Legal entities**
 - Individual persons
 - Non-profit, academic and higher education organisations
 - International European Interest Organisations (IEIO)
 - For profit organisations, companies and firm consortia with a legal status
- **from countries that are eligible to participate in the EU-funded H2020 framework programme***
- **Legal entities from other countries on a case-by-case basis**
 - a check with the EC legal service will be performed during the application period and the applicant will be informed if the eligibility is compatible with the programme (April to October 2021)

*https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-a-countries-rules_en.pdf

Evaluation criteria



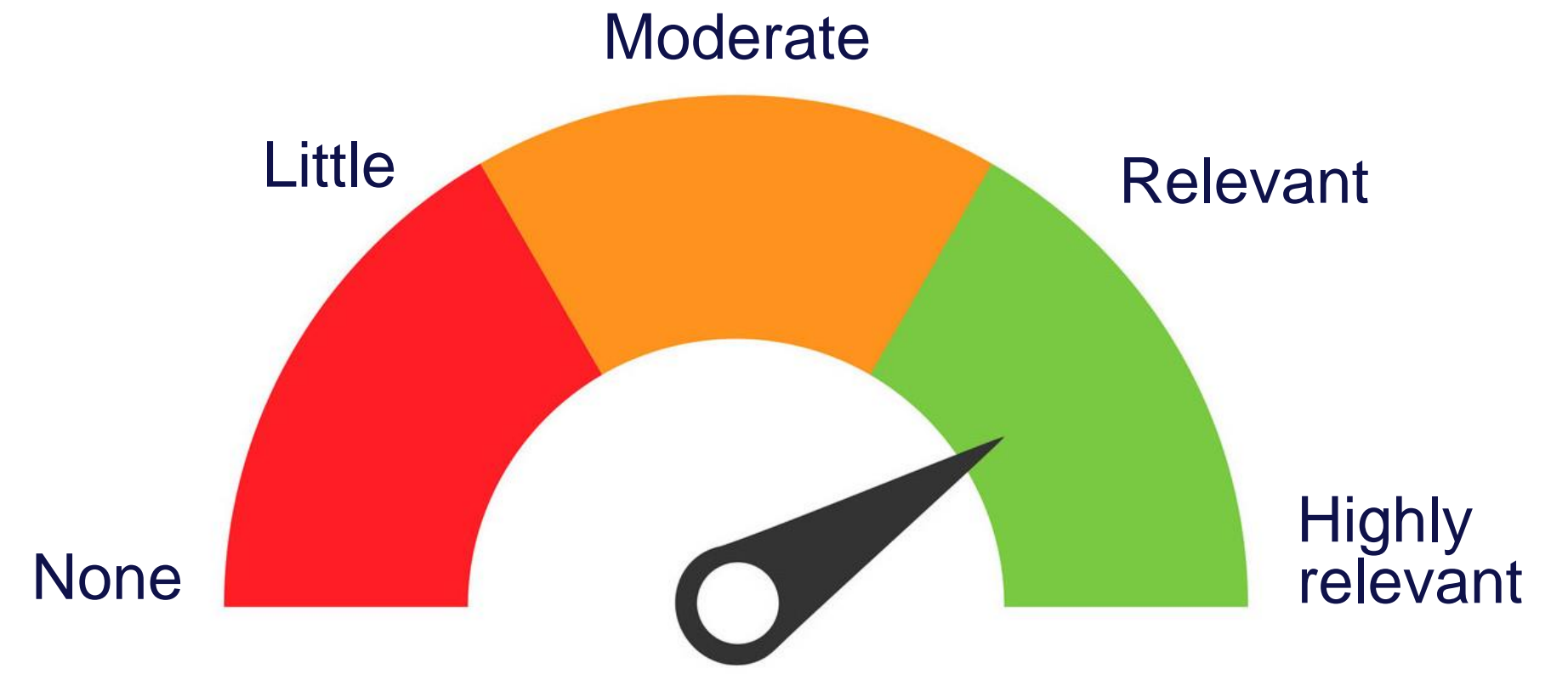
Technical feasibility



Economic viability in terms of revenue potentials



Societal added value (avoids landfills, generates revenues, is transferrable to other projects)



Project relevance (Percentage of material that can profit and difficulty to implement in the region)

Immediate next steps

- **Compile the jury**
 - Montanistic sciences
 - Material sciences
 - Economists
 - Innovation management experts
 - Government agencies
 - Management of comparable projects
- **Consolidate the participation conditions**
- **Consolidate the selection criteria**
- **Compile the initial materials description so that participants can check if their proposals are compatible with the conditions of the FCC project**
- **Develop the award**
 - Service for the winner to advance the technology or to develop the business plan or manage the IP
- **Prepare the communications programme to accompany the competition start**