

Minutes

Project title	Linear Colliders - Tunnel Thermal Heat Recovery
Job number	
Meeting name & number	Linear Colliders - Tunnel Thermal Heat Recovery update
File ref	
Time and date	13:00 BST, 22 April 2022
Location	Microsoft Teams
Purpose of meeting	Project Review
Present	Steinar Staples, Duncan Nicholson, Serge Claudet, Reihaneh Hafizi, Hayley Ho, Alex Chen, John Osborne, James Mercia
Apologies	Matt Sykes
Circulation	Those present Steinar Staples, Duncan Nicholson, Serge Claudet, Reihaneh Hafizi, Hayley Ho, Alex Chen, John Osborne, James Mercia, Matt Sykes

Topic	Action
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1. Project update

Presentations given by Alex Chen, James Mercia and Reihaneh Hafizi:

- Technical design feasibility
- GIS analysis and demand feasibility
- Whole life cycle carbon assessment

The presentation is attached

2. Review of Arup questions

Discussion based on Arup's questions and CERN's replies about the tunnel design and related topics to heat recovery. Some key points are discussed:

- Assess the main tunnel only,
- Geothermal gradient is higher than CERN's estimate,
- Fire safety standard related to inflammable material may be a show stopper: is plastic pipe embedded in concrete acceptable?
- No cooling demand from residential building.
- Cost: Arup is to provide the list of cost items
- Electricity comes from French power grid which has lower carbon content

Date of circulation: 29 April 2022

Prepared by: James Mercia

Date of next meeting:

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Project title Linear Colliders - Tunnel Thermal Heat Recovery
Job number
Date of Meeting 21 April 2022

Topic

Action

3. Next steps and final deliverables

To deliver technical note covering findings so far and recommendations

AC, JM &
RH to write
technical
note