INPUT

1. Enter the figures for your project in columns Design data, TCO Calculation data and CO_2 emission data. Possible choices of pipe system are automatically governed by the actual temperatures and pressure which have been input

2. Define your bonded pipe project by choosing actual dimensions and adding length of trench in metres for each pipe dimension. Click on "Add+" to add more lines to your list. Your selections are saved automatically but can easily be changed or removed. When making the calculation, the system produces all possible pipe solutions for the actual dimensions

3. To include FlexPipes in your calculation, go to section "FlexPipe system", choose type of pipe, then click "Add+" to enter dimension and meter trench

4. Click the "Calculate TCO" button to start the calculation

OUTPUT

From the information on the input page, the TCO is calculated and presented. The results are split into different sets of graphs by dimensions, so you will see either one or two groups with the same chart type – one for bonded pipes dimensions DN20 to DN200 and another for bonded pipes DN250 to DN500. This is due to different production methods and insulation properties and enables a form of hybrid total solution to get the most optimal calculation. A third set of graphs will be present if you have included FlexPipes in the calculation.

TCO Calculation and Sliders

TCO Calculations are for the investment cost based on budget prices for pipe material, trench excavation and pipe installation. From the pie chart to the left of the bar chart, you will see the proportions of the 3 main cost areas that contribute to the investment cost. If you need to reflect a project with another proportion than what you can read from the pie chart, you can adjust this by pulling the handles in the sliders.

I.e: a project through the city center of a big city might have higher excavation costs than a transmission line out in the fields – thus you can increase the value on the slider for Trench Excavation. You will see that both the pie chart and the bar chart are affected by this change once you let go of the mouse after pulling the handle.

Energy loss and CO₂ emission graphics will provide more details regarding the development of these parameters as insulations properties get better.

Compare 2 Systems

Select two systems to compare from the list of calculated pipe solutions. In this way, you can i.e. compare the optimal system suggested by the TCO Tool with the system you would normally choose, if different – or compare insulation series for the same type of system. You will have the option to enter a manual price instead of the budget prices calculated by the TCO Tool. This would be relevant if you already have a price for pipe installation or trench excavation you would like to use. This is also an alternative to using the sliders.

Sections ROI, Unit Prices per metre trench and CAPEX/OPEX will show the different details from these points of view. Please note, that these sections will not be calculated unless two systems are selected in section "Compare 2 Systems".

Print

All graphics will be included in your print – please note that you only get the option to print if you have chosen two systems in section "Compare 2 systems".

We have included an option for you to write extra information as a subtitle to your project.

