

Financial status of the Fehmarnbelt project.

The financial status of the Fehmarnbelt project is healthy and well-documented in a comprehensive financial analysis of the project. The analysis was presented in 2016 after a thorough review of the project's finances, risks and reserves by an external auditor. The review showed that loans for financing the fixed link can be repaid in 36 years. The total budget is DKK 52.6 billion. On the majority of the budget, fixed-price contracts have been signed and a high degree of budget certainty ensured. The total tunnel budget includes a reserve of DKK 7 billion, a figure determined after the thorough external review of the project's overall finances and risks.

The financing model for the Fehmarnbelt Fixed Link entails that the project costs will be fully financed by government-guaranteed loans to be repaid through user charges for travellers who opt to use the road or railway link. Consequently, it is the future users of the Fehmarnbelt link who will pay for the tunnel project.

Femern A/S presented an analysis in February 2016 of the overall finances for the project, including construction costs, operation, maintenance and reinvestment overheads, EU funding, traffic revenues and interest charges. The analysis showed that the project finances are realistic, and that the loans can be repaid within 36 years. The financial analysis has been published on Femern A/S' website [here](#).

The analysis of the project finances is generally based on cautious assumptions, and independent experts performed external quality assurance on a number of the key parameters, including the traffic forecast, construction budget, volume of reserves and the German plan approval procedure.

The construction budget for the Fehmarnbelt tunnel is DKK 52.6 billion, including a reserve of DKK 7 billion. The size of the reserve was determined by the accounting and consultancy company EY, based on a thorough external review of the project's finances and risks.

The main item in the construction budget consists of four large civil works contracts, which account for the majority of the tunnel construction. Intensive negotiations with the contractors successfully brought the first tender prices down by DKK 7 billion before the binding civil works contracts could be signed on 30 May 2016.

The contracts are conditional, so that the work will not be started before the project is finally approved in Germany. But the contracts – and not least their prices – are final. That means that there is a high degree of budget certainty for the majority of the project's construction costs. For the other contracts budgets are quality assured through a series of external reviews.

Denmark owns the fixed link. That means that profits from the link will pay for the Danish landworks in the form of expansion and electrification of the railway between Ringsted and Rødby – a project priced at DKK 9.5 billion in total, including reserves of DKK 2 billion – and

for most of the subsequent operation and maintenance of the section. These are costs that would otherwise have been financed by Danish taxpayers.

Because the Fehmarnbelt project is long-term and financed via loans, interest rates are an important factor of its overall financing. Because the Danish government guarantees its finances, loans to finance the Fehmarnbelt Fixed Link can be raised at low interest rates. This model, known as the 'state-guarantee model' was also used successfully for financing the fixed links across the Great Belt and the Øresund. The project finances are calculated based on a cautious assumption of a net interest rate of 3%. The reality is that if those loans were raised today, the interest rate would be close to zero.

The Fehmarnbelt project will contribute to expansion of the European transport network, which is why the EU is providing funding. The tunnel and the Danish landworks are cautiously assumed to receive funding equivalent to 10% of the cost of construction, or around DKK 5.8 billion. The tunnel has been awarded DKK 4.4 billion for the period up to 2020, and there will be more opportunities to apply for further funding after 2020.

A comprehensive forecast has been compiled for how traffic in the region will develop once the tunnel is open. The tunnel is built to last for at least 100 years, and the traffic forecast is therefore used to predict trends in traffic volumes and patterns over many years, rather than to provide an indication of precisely how much traffic there will be year on year. The forecast was compiled by the same German experts that compile the official German Federal Transport Ministry's traffic forecasts, and to the same high standards. It was subsequently quality assured via an external review performed by consultant specialists COWI.

Key figures from the Financial Analysis, February 2016	
Construction budget for the tunnel - of which, reserves	DKK 52.6 billion DKK 7.3 billion
Construction budget for the Danish landworks - of which reserves	DKK 9.5 billion DKK 2.2 billion
Assumed EU funding during construction, tunnel and landworks - of which, funding granted for 2017-2020	DKK 5.8 billion DKK 4.4 billion
Operation, maintenance and reinvestment per year - tunnel - Danish landworks	DKK 468 billion p.a. DKK 239 million p.a.
Presumed real interest rate	3.0 per cent p.a.
Repayment time	36 years