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## ► Price Regulation Hydroelectric Projects Index Regulation from 01.01.1997 to 01.01.2026

We have considered the development of cost during the year 2025 and updated the indices which cover the time from 1.1.1997 to 1.1.2026. Updated indices are as follows:

- |                              |                          |
|------------------------------|--------------------------|
| • Mechanical components      | 2.45, increased by 6.5%  |
| • Electrotechnical equipment | 2.33, increased by 6.0%  |
| • Construction               | 3.20, increased by 3.1%  |
| • Tunnels                    | 3.19, increased by 3.82% |
| • Embankment dams            | 2.77, increased by 3.2%  |

Comments and justifications to the indicated indices are as follows:

### ***Mechanical components - Cost development***

The average bid prices from suppliers in the market indicate an increase in prices for turbines, pipes, valves and gates for hydropower during 2025. It seems like the suppliers are experiencing high demand and limited capacity which in turn contributes to increased prices.

For some segments of the market, new suppliers are attempting to enter the market, leading to a larger variation regarding bid prices.

This index adjustment is primarily based on Statistics Norway's (SSB) data:

- The Producer Price Index for the metal goods industry shows a 1.5 % increase from the previous year.
- The Price index of first-hand domestic sales of iron and steel indicates a 4,7 % increase for det previous year.
- The Industrial Wage Index has risen by 4.6%

The exchange rate between the Norwegian Krone (NOK) and the Euro (EUR) is relevant, as approximately 90% of turbine equipment and about 40% of other mechanical components for power plants are produced outside of Norway. Over the past year, the exchange rate has been quite stable.

A long-standing trend is that customers are demanding increasingly extensive documentation for supplied equipment. This increases the administrative workload for suppliers, which in turn leads to higher project costs and prices.

Based on the above information our assessment is that the price level for mechanical equipment for Norwegian hydropower projects has increased by approximately 6,5 % during 2025.

**The new index for mechanical equipment for hydro power projects, effective from January 1<sup>st</sup>, 2026, will be 2.45.**

## ***Electrotechnical equipment - Cost development***

Reports from the supplier industry indicate that the activity level for electromechanical deliveries in the hydropower sector in 2025 is high. This is driven by increased electricity consumption, the need to modernize aging facilities, lifetime extensions, grid investments, the electrification of industry and transport, as well as stricter requirements for security of supply. Many owners are therefore assessing and planning measures which increases pressure in the supplier market.

Capacity challenges are emerging, particularly due to a shortage of engineers and skilled workers, affecting engineering, project execution, and delivery times. This development is expected to continue and further strengthen the demand for electromechanical deliveries.

Norconsult also experiences high activity within electrotechnical deliveries. In 2025, the trend of upgrade and maintenance projects continued, including the replacement of transformers, switchgear, and control systems. Pumped-storage projects are under assessment, and new conventional hydropower plants are in the planning phase. These require licensing, and few large projects were awarded contracts in 2025. Cable deliveries are also affected by the high activity level.

Norconsult observe that fewer suppliers choose to participate in tender competitions compared to previous years. The suppliers report high utilization of their machinery and manpower. As a result, they are selective of what projects they want to compete for. Norconsult see that the tender prices have increased with fewer competitors for each tender. Significant market pressure and limited available resources make suppliers increasingly selective on which projects they choose to bid on

Norconsult's experience aligns with the reports from the supplier industry: Overall, 2025 appears to be a year in which the electromechanical market is characterized by high demand, substantial project volumes, and bottlenecks related to capacity and competence.

Index adjustments are mainly based on statistics from Statistics Norway (SSB). SSB's index for electrical machinery and equipment shows a price increase of 4.6% in the domestic market, and a slight decrease of -0.1% in the combined domestic and import market.

The iron and steel index shows a decline of -0.4% in the domestic market and an increase of 4.2% in the combined domestic and import market.

The index for metals excluding iron and steel was 2% for the domestic market and -3.1% for the combined domestic and import market this year.

The consumer price index for goods and services with labour costs as the dominant factor changed by 0.5% in 2025. This is a lower increase than in previous years. Nevertheless, a high consumer price index in 2025 has contributed to higher prices for electrotechnical deliveries.

The exchange rate against the euro remains at a high level, which contributes to maintaining high prices for deliveries produced within the EU.

**Based on our assessment of price indices and the hydropower project market, price development in 2025 is estimated at 6.0%.**

**The new index for electrotechnical components for hydro power projects is therefore 2.33.**

### **Constructions in general - Cost development**

Like the previous years, only a limited number of hydropower-related construction projects have been tendered in 2025. Further, the available prices vary significantly depending on the location and the specific conditions at each site. This makes the statistical data of hydropower-related construction projects by which to assess the development in unit prices insufficient. Hence, we will rely on the Statistics Norway's (SSB) Construction cost index for concrete bridges (table 08662) for the assessment of the development in unit prices.

SSB's index for concrete bridges shows an increase of 3.1% from the 4<sup>th</sup> quarter of 2024 to the 4<sup>th</sup> quarter of 2025, down from a 3.7 % increase last year.

In SSB's index for concrete bridges, labour input constitutes 46%, materials 30%, machine and transportation 8% of the total cost, while other costs constitute 16%.

The cost of materials for concrete bridges in the same period showed an increase of 1.3 % compared to an increase of 4.3 % the year before (2024). Furthermore, total wages for workers in building and construction activities had an increase of 4.9 % in 2024 compared to 6.1 % in 2023.

SSB's statistics of construction cost for residential buildings have a more detailed breakdown on construction materials. These materials are also relevant for hydropower projects. Their cost developments over the last four years have been as follows:

	Changes from previous year (%)			
	Q4 2022	Q4 2023	Q4 2024	Q4 2025
Timber	-19,4 %	-9,9 %	10,7 %	13,4 %
Concrete	11,9 %	13,6 %	5,8 %	3,1 %
Concrete elements	19,0 %	4,1 %	1,2 %	5,2 %
Reinforcement steel	6,0 %	-16,6 %	8,1 %	-4,2 %
Structural steel	0,0 %	-8,6 %	-2,9 %	2,2 %

As can be observed from the table above, all materials except for reinforcement steel had an increase in prices last year. This together with the increase in wages are the main factors contributing to the increase in cost of construction of concrete bridges.

An overall assessment based on the considerations outlined above indicates a cost development for construction work in hydropower projects in line with the indexes. We chose therefore to use the index for concrete bridges from the SSB statistics as a representative "picture" of the cost development for the (civil) construction part of hydropower projects in 2025.

**Based on price indexes and the hydropower market, we suggest a cost development for the (civil) construction works of 3.1 % for 2025.**

**Hence, the index effective from January 2026 for general construction works is 3.20.**

### **Tunnels in rock - Cost development**

In 2025, as in previous years, the statistical data for assessing the development in unit prices remains insufficient due to the low number of assignments that include tunnels. Therefore, to evaluate the price development over the period, Statistics Norway’s “Construction cost index for road construction” (Table 08662) is used.

The construction cost index for road tunnels increased by 3,9% from the fourth quarter of 2024 to the fourth quarter of 2025. During the same period, the index for materials rose by 3.5%. The development is approximately the same as the previous year.

Construction prices are influenced by several factors during the period:

- The rise in prices for materials has increased by 3.9%.
- Labor cost in the period has increased by 4.9%.
- The fuel price has decreased by 5.2%.
- Key interest rate has decreased from 4.5 % to 4.0 %
- The consumer price index in the period has increased by 3.6%.

The cost of materials is higher for road tunnels than hydropower tunnels due to the greater amount of materials needed for road tunnel interiors, such as concrete elements, electrical components, heating, and so forth. Therefore, the tunnel index is considered more relevant than the material index.

**Based on price indexes and the hydropower tunnel market, we suggest a price increase of 3.82% for 2025. Hence, the rock tunnel index effective from January 1<sup>st</sup>, 2026, is 3.19.**

### **Embankment dam – Cost development**

Work on embankment dams in Norway are mainly in the form of rehabilitation, with project costs in the order of 20 to 250 mill. NOK. In recent years there has also been an increasing number of new dam projects being constructed.

The item prices for the different work specifications differ a lot due to the contractor’s pricing philosophy, depending on how much lump sums are favored over unit prices, so it may be misleading to use one or two main projects to obtain the correct indices.

In this respect it will be more correct to use SSBs cost statistics to evaluate the rise of the costs for the different types of work during 2025. Norconsult suggests using the indices of the road works which includes the same type of work as for an embankment dam.

Each index for the three different work categories is given in the table, including the rise in costs in 12 months in %

*Table 1. Construction cost index for road construction (SSB), as of January 21st 2026*

	<b>Change in per cent 4th quarter 2024 - 4th quarter 2025</b>
<b>Road construction, total</b>	<b>3,3</b>
Open air roads	3,0
Concrete bridges	3,1
Rock tunnels	3,9

Even if the cost index for roads includes a large part of works during winter, of which embankment dam works do not, the seasonal work for dams will be more intense requiring more equipment. Hence, it is suggested that the indices for road works are very similar to the work performed at embankment dams and will be used as they are given in the table.

However, the indices are suggested “weighted”, given as percentage, to obtain a total price increase as follows:

- |  |                                |
|--|--------------------------------|
| 1. Embankment dam works (similar to road works): | +3,0% (70% of the total costs) |
| 2. Concrete works, seepage measurements etc:     | +3,1% (10% of the total costs) |
| 3. Works in the quarry (similar to tunnels):     | +3,9% (20%)                    |
| <b>4. <u>SUM:</u></b>                            | <b>+3,2 %</b>                  |

**Norconsult suggests an increase of the DAM INDEX for embankment dams from January 1<sup>st</sup> 2025 to January 1<sup>st</sup> 2026 of 3,2%, increasing the index from 2.68 to 2.77.**

In addition, the suggested costs for selected embankment dam works in the NVE-report 46-2016 have been compared to actual prices from eight selected projects carried out in the period 2016-2025.

As mentioned earlier, prices will vary quite a lot from project to project depending on several factors. The actual prizes have been adjusted for the total size of each project, but not for special conditions such as long transport distances or more difficult conditions in the quarry or at the dam site.

Overall, the prices from the report dated in 2016, adjusted annually, seem to be fairly correct compared to prices from actual projects. Below are shown price-curves (blue) for selected works, from 2016-2026, compared to actual prices (red).



Figure 1. Price of quarried rockfill



Figure 2. Price of quarried/crushed filter

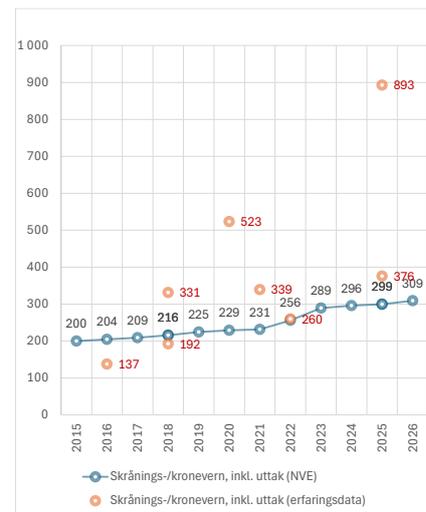


Figure 3. Price of rip-rap

Best regards  
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