Debt Entities

Debt

The Debt section covers all parameters which are connected to the debt financing through banks. Typically project financing instruments for renewable energies (for now without company current accounts) are considered.

Input Field	Description	Unit	Presetting
Name	Debt tranche name	Free text	"Debt" + Index
Loan Type	The following loan types are supported: **Term Loan**: A Term Loan is issued completely at the beginning and reimbursed completely at the end of the Loan Period. Interest payments becoming due during the Loan Period. **Construction Loan**: A Construction Loan is issued piece by piece at different Issuing Dates and reimbursed completely at the end of the Loan Period. Interest payments becoming due during the Loan Period pending on the Construction Loan interest rate.	Selection	Term Loan
Driver	The following drivers are available: • Fix per Production Unit • Fix per Project • Production • Power • Material • Sales • Single per Production Unit • Single per Project • Template • Fix • Asset Purchase Price • Capex • Next Debt Service **Drivers**: All available drivers in green[::]match. The column "Applicability" shows all section in which the different drivers are available.	Selection	Fix

Driver Type	Description	Applicability
Fix per Production Unit	Fix value input in Currency per Production Unit. The value is multiplied with the number of added Production Units. For example: "EUR 20'000 per Production Unit and year" x 2 added Production Units" makes 40'000 EUR /a.	Template, Sales, Opex, Capex, Transaction Expenditures, Floor, Cap
Fix per Project	Fix value input in Currency per Project. The value is adopted without adjustments. For example: "40'000 EUR/a per Project". When for Start and End of the Date Choice Box "Production Unit Start" or "Production Unit End" is choosen in combination with this driver, the value is assigned to the Production Units pro rata.	Template, Sales, Opex, Capex, Transaction Expenditures
Production	The value input is in Currency per hour according to the Unit and is multiplied with the Production per added Production Unit. For example: "80 Eur/MWh with 1 added Production Unit with a production of 1'000 MWh/a" makes 80'000 EUR/a.	Template, Sales, Opex, Capex, Floor, Cap
Power	The value input is in Currency per Unit per per year and is multiplied with the Power per added Production Unit. For example: "10'000 EUR/MW/a with 1 added Production Unit with an installed Power of 2 MW" makes 20'000 EUR/a.	Template, Sales, Opex, Reserves, Capex, Transaction Expenditures, Floor, Cap
Material	The value input is in Currency per Unit per year and is multiplied with the amount of material per year.	Sales, Opex
Sales	The value input is in percent and is multiplied with the Sales per added Production Unit.	Opex
Single per Production Unit	The value input is in Currency as single amount per added Production Units. **Note**: You should define as End the value Start + 1 month to receive a "real" single amount. Otherwise the single amount is divided through the months between start and end.	Sales, Opex
Single per Project	The value input is in Currency as single amount per Project. **Note**: You should define as End the value Start + 1 month to receive a "real" single amount. Otherwise the single amount is divided through the months between start and end.	Sales, Opex
Template	Adoption of a Template according to the selection. The calculation occurs according to the driver input from the selected Template.	Sales, Opex
Fix	Fix value input in Currency. The value is adopted without adjustments.	Debt, Reserves, Shareholder Loans
Asset Purchase Price	The value refers to the percentage of the Asset Purchase Price.	Debt, Shareholder Loans
Capex	The value refers to the percentage of the sum of all Capexes, regardless if they are "Included in the Asset Purchase Price" or not.	Debt, Shareholder Loans
Next Debt Service	The Debt Service demand is orientated as percentage of the sum of the Debt Service from all Debt Tranches according to the Look Ahead Period. Thus the Reserve account demand is variable.	Reserves
Equity	The value refers to the percentage of Equity.	Shareholder Loans

<table>
<tr><td>Value</td><td>Input of a value proper to the selected driver.</td><td>Value in combination with driver</td><td>0</td></tr>
<tr><td>Issuing Date</td><td>The Debt tranche Issuing Date is set with a Date Choice Box. For example: "Issuing at Transaction", this means Transaction + 0 months.

When the Issuing is before the Transaction Date (TRX), the book value is calculated automatically per Transaction Date as corrected Value per Transaction.

The entered month corresponds to the last day of this month. For example: A Due Date 01 /2015 means that the Issuing occurs per 01.31.2015 and the corresponding interest and reimbursements are calculated effective from 02.01.2015.</td><td>Date Choice Box</td><td>Transaction</td></tr>
<tr><td>Consolidation Date

(Loan Type = Construction Loan)</td><td>The Construction Loan is issued on different Issuing Dates. On the basis of different Issuing segments these dates can be determined.

<table><tr><td>Add</td><td>With this button a new tranche can be added to the Construction Loan.</td></tr><tr><td>Remove</td><td>With this button an existing tranche can be removed from the Construction Loan.</td></tr><tr><td>Tranche Size</td><td>From the second segment on the Construction Loan tranches can be set here in percent of the whole Construction Loan. The first tranche is calculated automatically.</td></tr></table></td><td>Selection</td><td></td></tr>
<tr><td>Interest Construction

(Loan Type = Construction Loan)</td><td>Annualized interest rate (nominal) which is executed on the Construction Loan of the previous period (this means after redemption of the previous period respective before redemption of the actual period). The interest charge is defined by the Method of Payment allocation (Interest) for the fixed Interest Period since Issuing Date. For periods afterwards the Longterm Interest Rate is used.</td><td>Percent nominal per year</td><td>0%</td></tr>
<tr><td>Loan Period</td><td>The Loan Period in years. With the end of the loan the loan amount has to be reimbursed.</td><td>Years</td><td>0</td></tr>
<tr><td>Redemption Mode</td><td>The following Redemption Modes are available:

<table><tr><td>Linear</td><td>Linear Redemption, this means the Issuing Value is divided by the redemption periods less redemption free periods and the resulting redemption value is constantly considered in the Cashflow Statement.</td></tr><tr><td>Annuity</td><td>Annuity, this means the sum of interest and redemption value are considered as a constant debt service in the Cashflow Statement.</td></tr><tr><td>Bullet</td><td>Bullet Redemption, this means the whole loan is reimbursed at the end of the loan period.</td></tr></table></td><td>Selection</td><td>Linear</td></tr>
<tr><td>Interest for Annuity Calculation (Redemption Mode = Annuity)</td><td>Interest input in % or bps for the Annuity Redemption calculation. This interest rate is only used for the calculation of the redemption amounts and not for the actual interest payments.</td><td>%</td><td>0</td></tr>
<tr><td>Redemption Free Period</td><td>Redemption Free months/years since Issuing Date.</td><td>Months /Years since Issuing Date</td><td>0 months</td></tr>
<tr><td>Redemption Frequency</td><td>Frequency of the Redemptions since Issuing Date. For example: "quarterly", this means every 3 months. Compare the same logic in Payment Frequency at Methods of Payment.</td><td>Months</td><td>monthly</td></tr>
<tr><td>Interest</td><td>Annualized interest rate (nominal) in % or bps which is executed on the Debt value of the previous period (this means after redemption of the previous period respective before redemption of the actual period). The interest charge is defined by the Method of Payment allocation (Interest) for the fixed Interest Period since Issuing Date. For periods afterwards the Longterm Interest Rate is used.

The Interest is composed by the Base Rate and the Margin:

<table><tr><td>Base Rate</td><td>Defined Interest Base Rate.</td></tr><tr><td>Margin</td><td>Additional Margin on the Base Rate in % or in basis points (bps).</td></tr></table></td><td>%</td><td>0%</td></tr>
</table>

<table>
<tr>
<td>Interest Period Fixed</td>
<td>Valid Period of the interest rate. For periods afterwards the Longterm Interest Rate is used.

<table>
<tr><td>Loan Period</td><td>The fixed Interest Period is valid for the whole Loan Period. Thus the longterm Interest Rate does not apply.</td></tr>
<tr><td>Custom</td><td>The fixed Interest Period is temporary. A time period in years has to be defined for the interest. After this time period, the longterm Interest Rate applies.</td></tr>
</table>

Fixed Interest Period = 0

A fixed interest period of Debt Tranches or Shareholder Loans of 0 years and a longterm interest rate of 0% can lead to an unintended errors! The interest according to the Debt Tranche or Shareholder Loan is in this case 0% despite a different interest input of for example 4% because in this case, the longterm interest rate of 0% is adopted after the fixed interest period of 0 years.</td>
<td>Years since Issuing Date</td>
<td>0</td>
</tr>
<tr>
<td>Capexes (Driver = Capex)</td>
<td>Selection of the Capex costs which are considered for the Debt value.

<table>
<tr><td>All</td><td>All existing Capex entities are considered.</td></tr>
<tr><td>Some</td><td>With "Some" individual Capex entities can be selected, which are considered for the Debt calculation.</td></tr>
</table></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method of Payment (Interest)</td>
<td>Selection of the Method of Payment which is used for Interest payments:

<table>
<tr><td>Matched to Redemption</td><td>The interest payments matches with the Redemption payments. With Redemption payments every quarter for example, the interest payments will also occur every quarter at the same date.</td></tr>
<tr><td>Assign Method of Payment</td><td>The interest payments occur according to the Method of Payment:

Allocation of a Method of payment. For example: "first time at Transaction, every 3 month with a Target of 2 months". When no Method of Payment is used, the Profit & Loss statement is consistent with the Cashflow statement. Affected net current assets have a value of 0 in the Balancesheet.</td></tr>
</table></td>
<td>Method of Payment allocation</td>
<td>None</td>
</tr>
</table>

Calculation

Debt affects the Debt calculation.