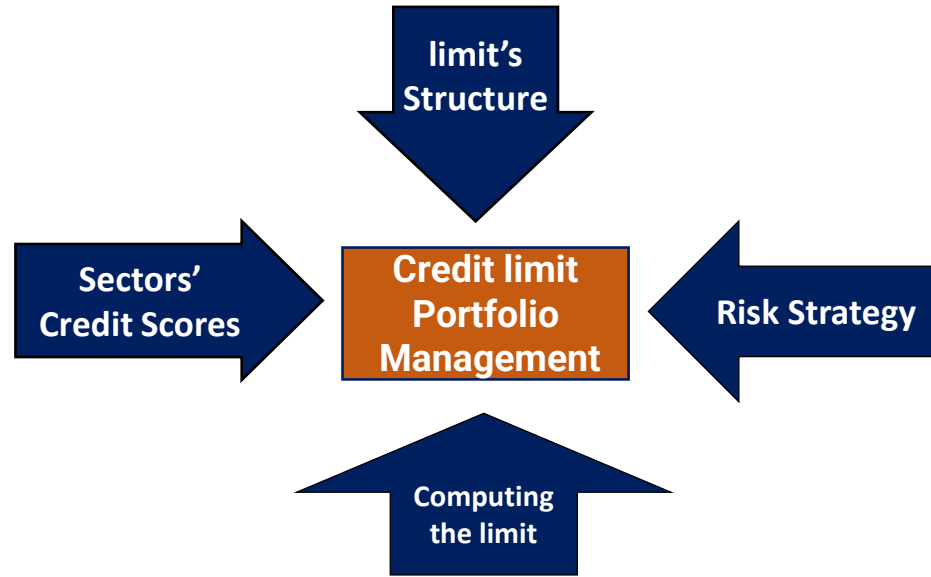


## Developing credit limits per counterparty

**Methodology:** Minimize portfolio's economic capital consumed

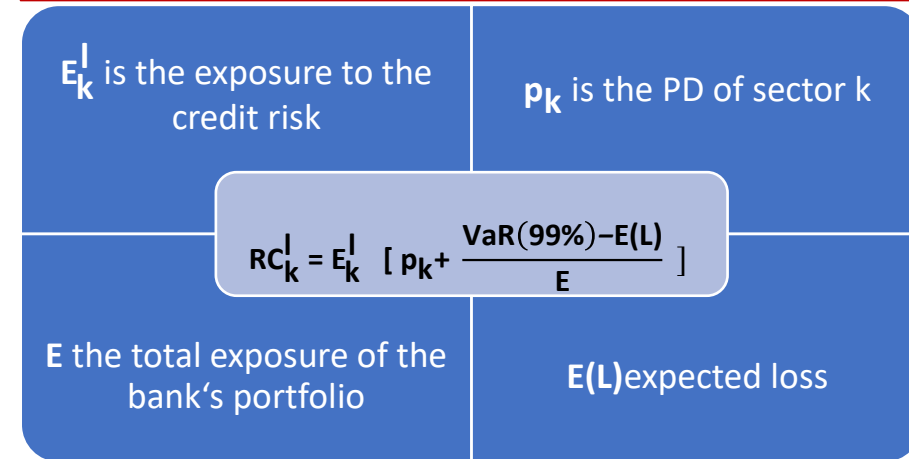


### Credit limit optimization for renewable energy



## Renewable Energy sector Optimal Weight

### Local optimum of RC ( $RC_k^l$ ) for sector k



### Credit allocation Optimization

| Nb | Sector                                  | Exposure | Credit limit | Evolution |
|----|-----------------------------------------|----------|--------------|-----------|
| 1  | Real estates                            | 28%      | 21%          | -7%       |
| 2  | Agriculture, food, and fisheries        | 18%      | 18%          | 0%        |
| 3  | Trade                                   | 16%      | 19%          | +3%       |
| 4  | Manufacturing industries                | 11%      | 11%          | 0%        |
| 5  | Mechanical and steel industry           | 7%       | 5%           | -2%       |
| 6  | Communication                           | 5%       | 8%           | +3%       |
| 7  | Textile, clothing, & leather industries | 3%       | 3%           | 0%        |
| 8  | Renewable energies                      | 3%       | 10%          | +7%       |
| 9  | Transport                               | 4%       | 1%           | -3%       |
| 10 | Chemical industry                       | 1%       | 1%           | 0%        |
| 11 | Pharmaceutical industry                 | 4%       | 3%           | -1%       |
|    | Total                                   | 100%     | 100%         | 0%        |

**Conclusion:** We achieve an increase in the weight of the renewable energy sector from 3% to 10% while decreasing the weight of higher risk sectors in terms of pollution by the same proportion by channeling a higher proportion of loans into renewable energy.