优化目标1

LCE介绍。。。

Where:

**LCE**: Levelized Cost of Energy (€/kW)

**CRF**: Capital Recovery Factor (%)

**ICC**: Installed Capital Cost (€/kW)

**AOE**: Annual Operating Expenses (€/kW)

**AEPne**t : Net Annual Energy Production (kW)

For more details we can get:

Where

**d**: interest rate (%)

**n**: operational life (years)

**ANN**: the annualized costs (insurance, other expenses)

**O&M**: Operation & Maintenance Cost (€/kW)

**CFnet** : net capacity factor

**8760**: hours per year

优化目标2

从城市用电的角度来看，Photovoltaic and Wind turbine maybe cannot satisfied the need. We should use some Diesel generator or Lead-acid battery to get more low-price energy. But the pollution by using these technologies may become a problem to the environment. So we must reduce the pollution, the pollution function can be represented as:

约束1

要求电量达到**AEPne**t，可溢出10%，有

综上 得到如下 多目标优化方程