



Development of a Financial Decision Making Model

WP T2

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WP T2 Development of a Financial Decision Making Model (FDDM)

Task Leader: TK Renewables

Objectives of the FDD Model

To project, evaluate & optimise **financial** performance of community-scale hydrogen-based energy matrix

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Establishing the **business case** for developers/operators/users for the deployment of renewable hydrogen projects in NWE

Key analysis within the model

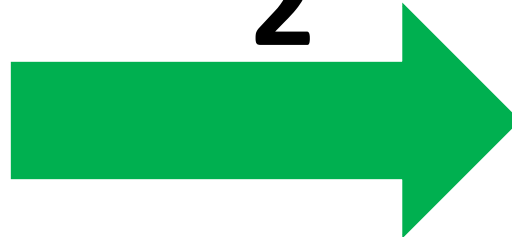
Despatch down & Capacity Factors for renewable sources	Throughout NWE
Energy Market pricing analysis	By region
Hydrogen Market Analysis	Capacity and value of potential revenue streams
CAPEX & OPEX	Covering the total supply chain
End use applications	Investments & Market pricing
Financial support mechanisms	By region

Model to be validated using the data coming from the three Investment Workpackages within GenComm



What added value can be extracted from under-utilised capacity and where can I sell H₂?

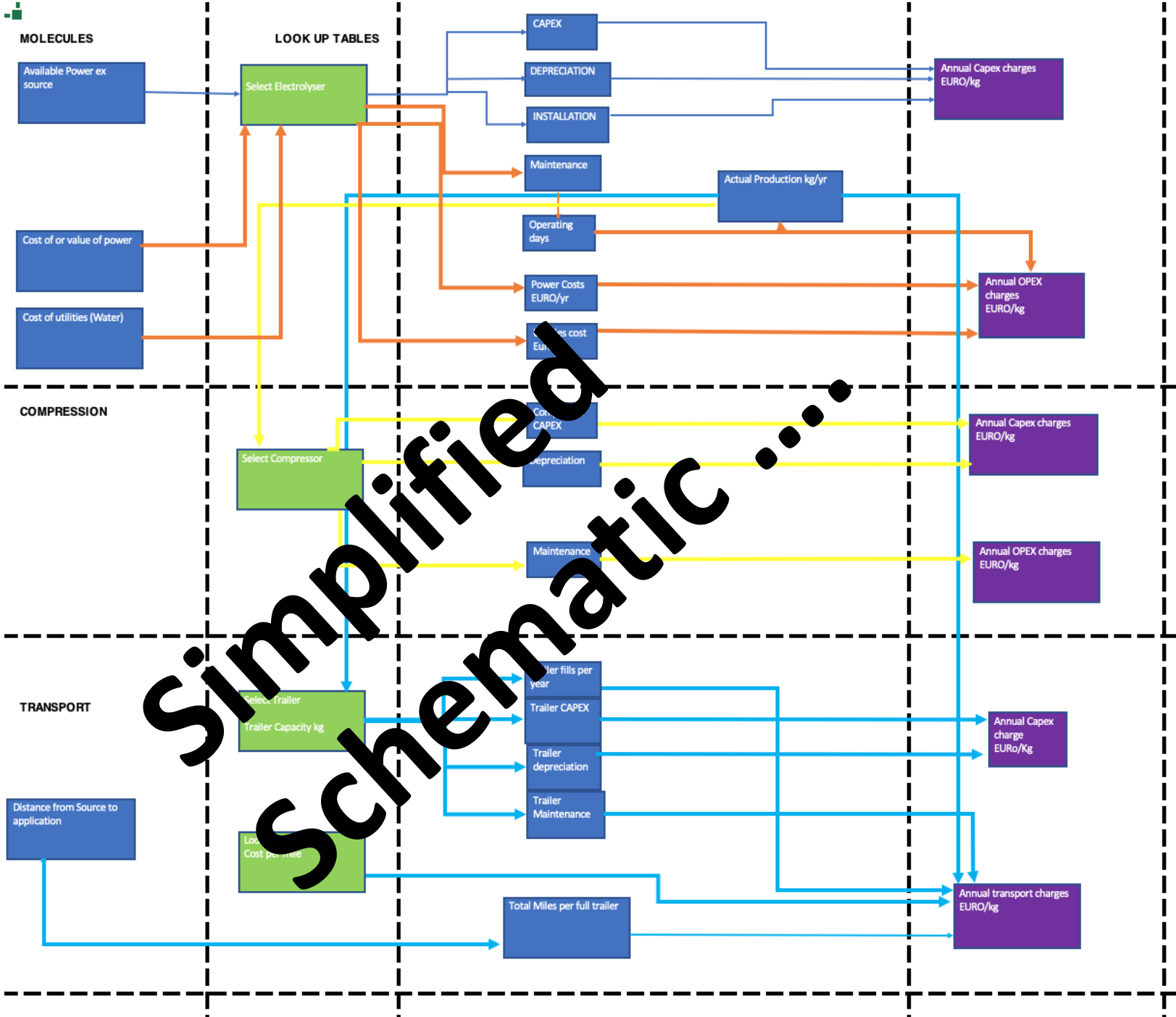
H₂



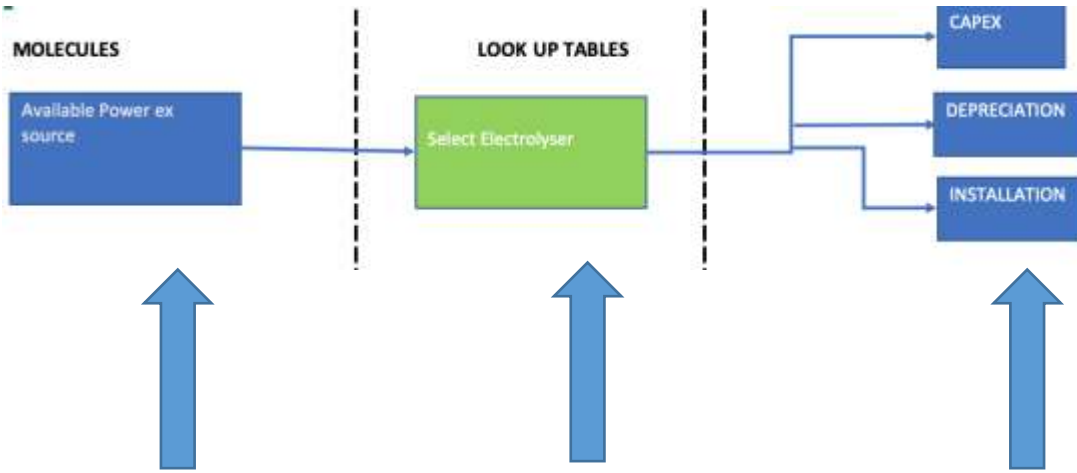
Transport
Heat
Power Generation
Industry



Where can hydrogen be sourced to meet a local demand and at what cost?



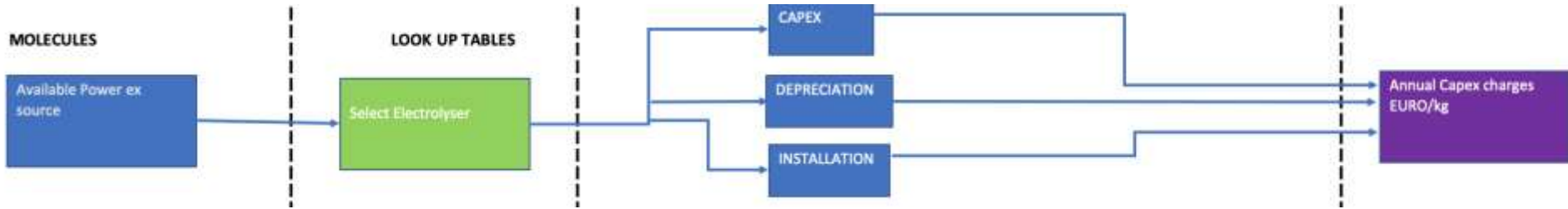
Simplified Schematic ...

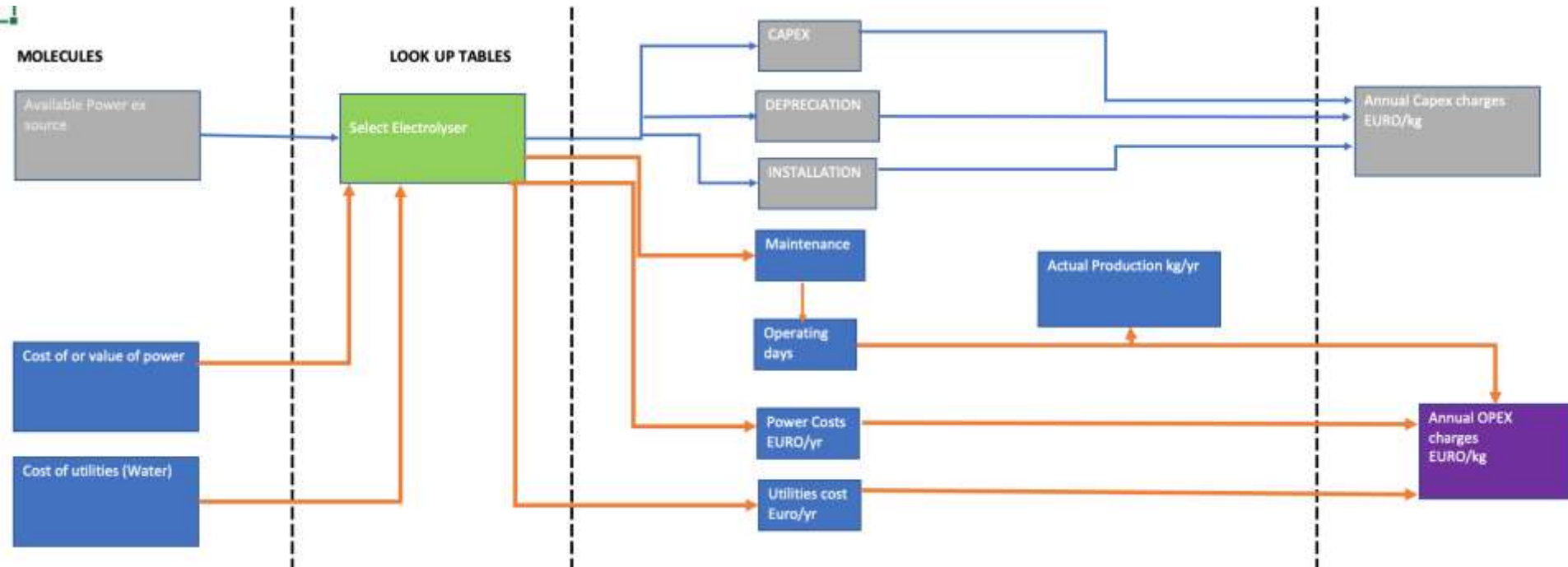


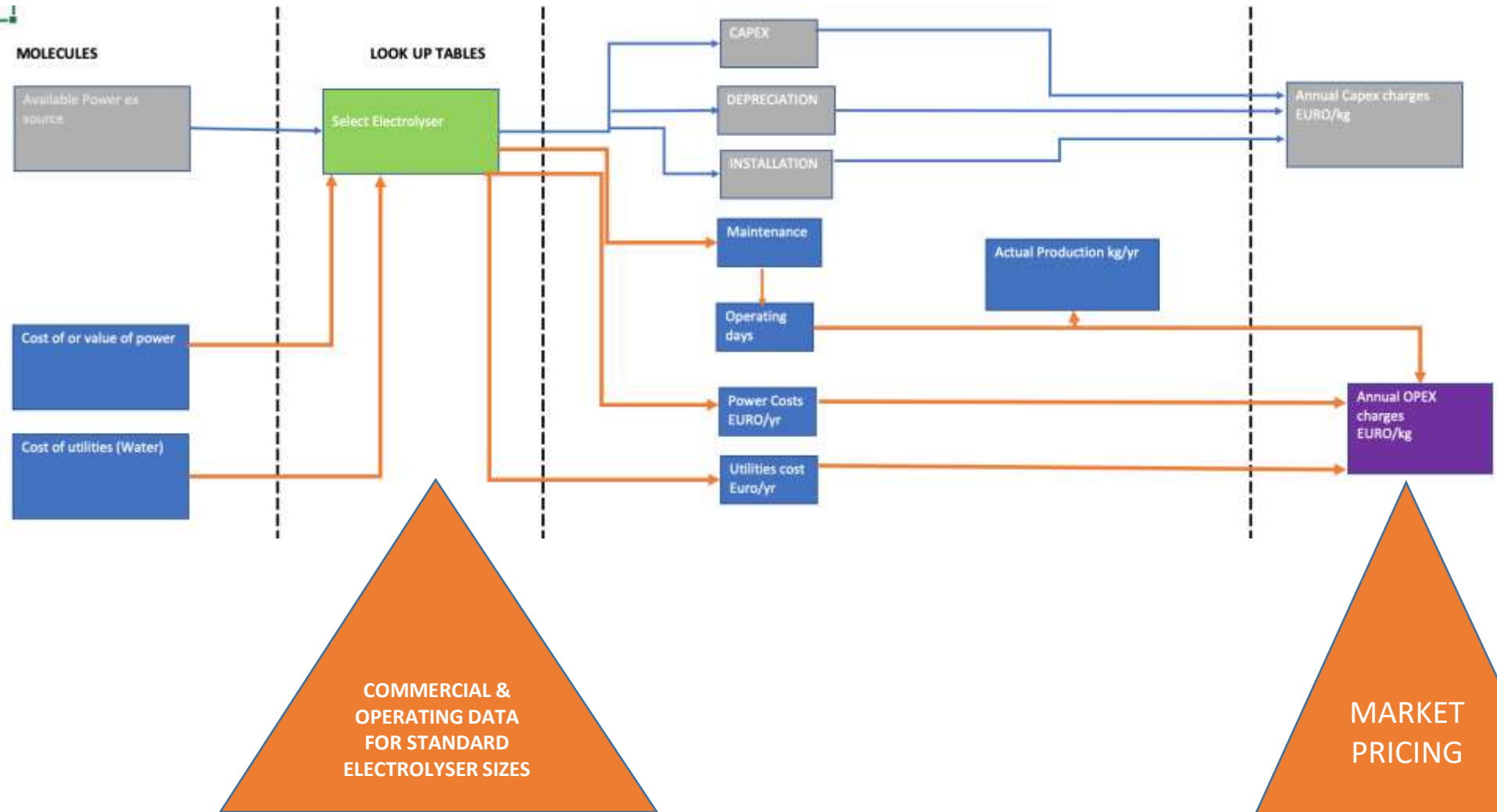
Determines the capacity of hydrogen that can be produced

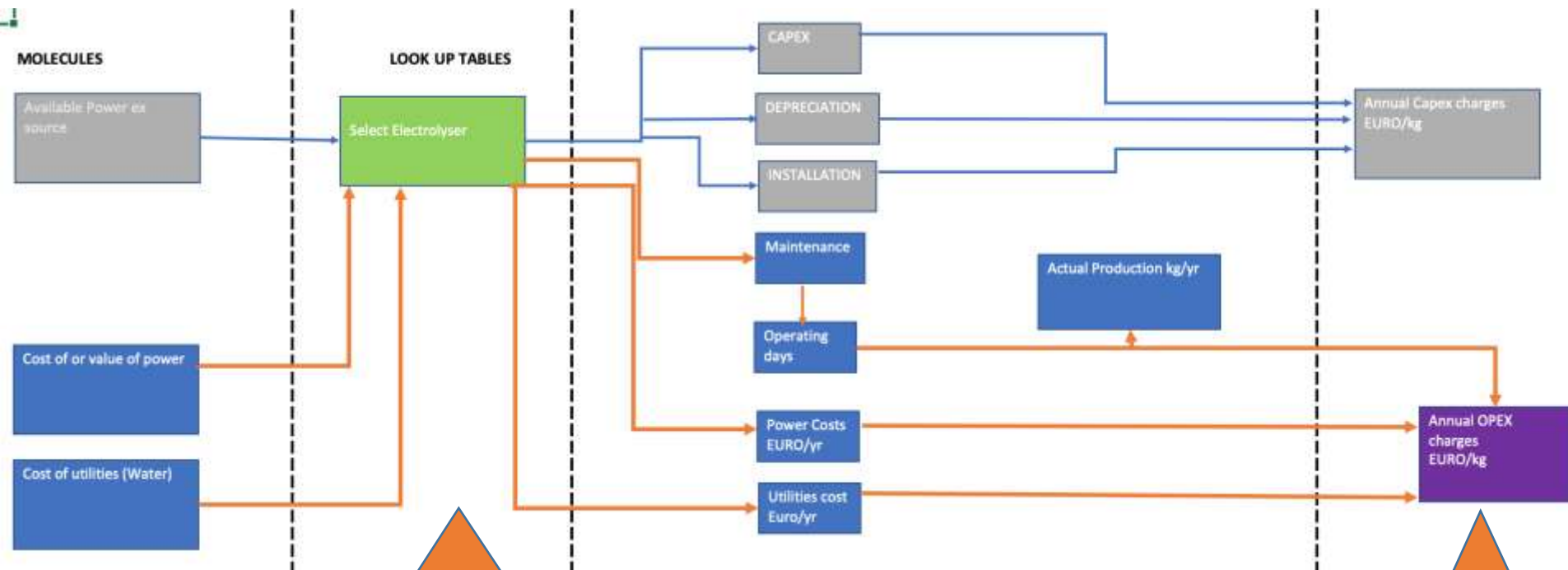
Optimum electrolyser sizing selected

Look up table - cost data for chosen electrolyser









COMMERCIAL &
 OPERATING DATA
 FOR STANDARD
 ELECTROLYSER SIZES

Similar data flows and look ups for
 compression, storage, transport and
 end use cases

MARKET
 PRICING

In Summary

The FDM Model will establish a commercial view of the opportunity for under-utilised renewable power to Hydrogen projects

Assists communities in realizing the commercial benefits of such projects

Interreg



EUROPEAN UNION

North-West Europe

GenComm

European Regional Development Fund

Thank you!