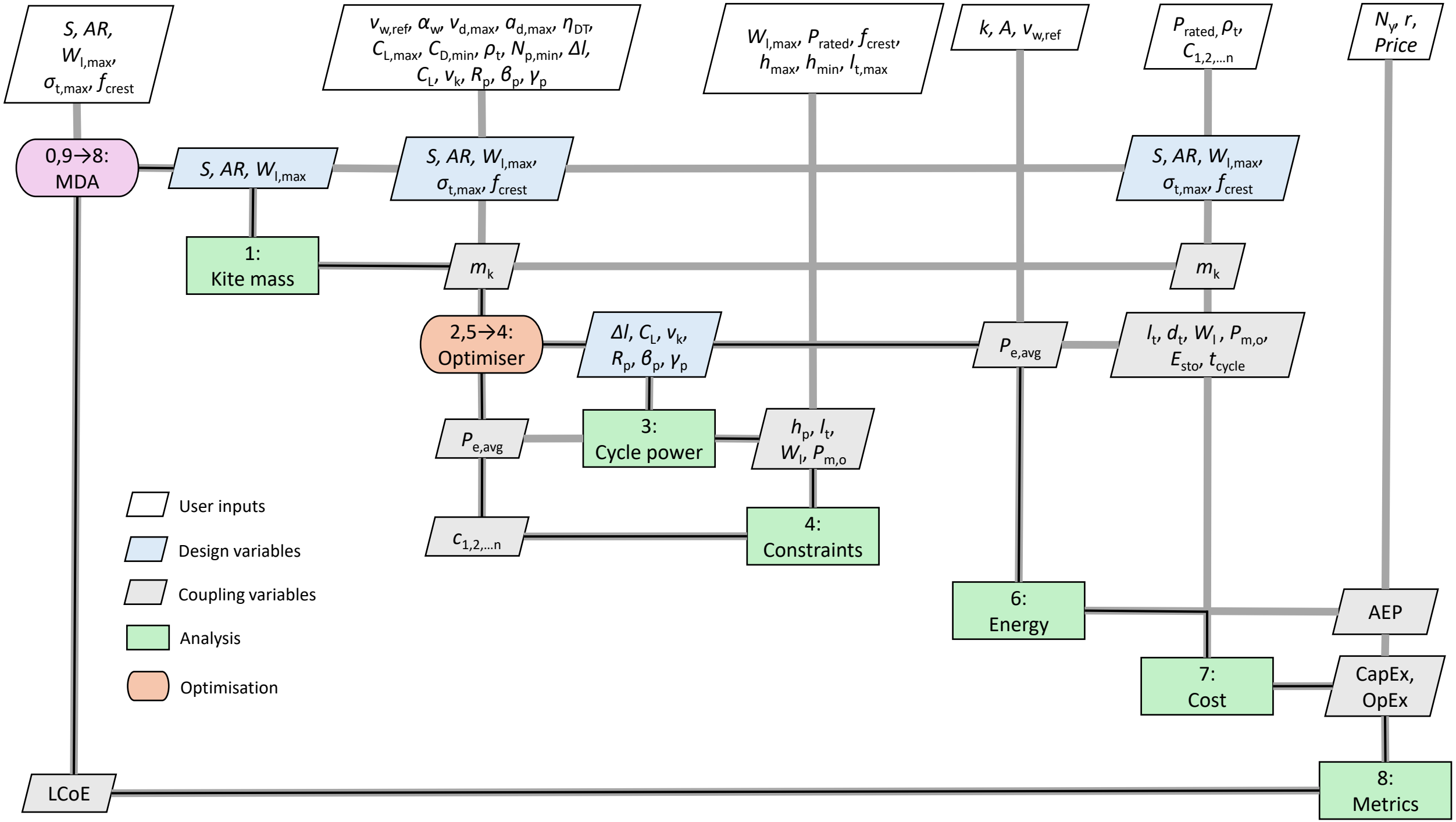
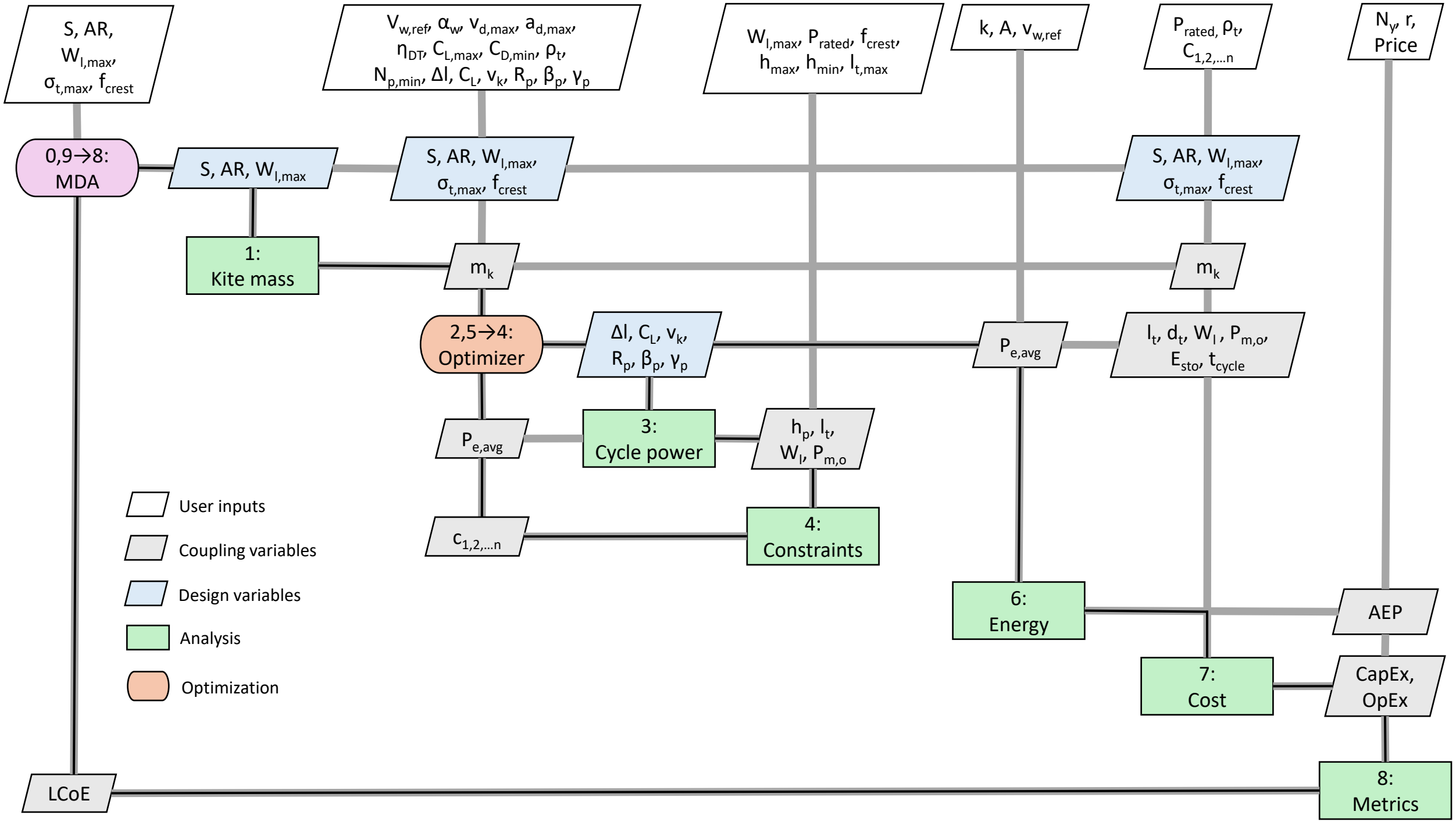

S, AR, W_l,max, σ_t,max, f_crest
v_w,ref, α_w, v_d,max, a_d,max, η_DT, C_L,max, C_D,min, ρ_t, N_p,min, Δl, C_L, v_k, R_p, β_p, γ_p
W_l,max, P_rated, f_crest, h_max, h_min, l_t,max
k, A, v_w,ref
P_rated, ρ_t, C_1,2,...n
N_y, r, Price
0,9→8: MDA
S, AR, W_l,max
S, AR, W_l,max, σ_t,max, f_crest
S, AR, W_l,max, σ_t,max, f_crest
1: Kite mass
m_k
m_k
2,5→4: Optimiser
Δl, C_L, v_k, R_p, β_p, γ_p
P_e,avg
l_t, d_t, W_l, P_m,o, E_sto, t_cycle
P_e,avg
3: Cycle power
h_p, l_t, W_l, P_m,o
c_1,2,...n
4: Constraints
6: Energy
AEP
7: Cost
CapEx, OpEx
LCoE
8: Metrics
User inputs
Design variables
Coupling variables
Analysis
Optimisation


S, AR, $W_{l,max}$, $\sigma_{t,max}$, f_{crest}
$V_{w,ref}$, α_w, $v_{d,max}$, $a_{d,max}$, η_{DT}, $C_{L,max}$, $C_{D,min}$, ρ_t, $N_{p,min}$, Δl, C_L, v_k, R_p, β_p, γ_p
$W_{l,max}$, P_{rated}, f_{crest}, h_{max}, h_{min}, $l_{t,max}$
k, A, $v_{w,ref}$
P_{rated}, ρ_t, $C_{1,2,...n}$
N_y, r, Price
0,9→8: MDA
S, AR, $W_{l,max}$
S, AR, $W_{l,max}$, $\sigma_{t,max}$, f_{crest}
S, AR, $W_{l,max}$, $\sigma_{t,max}$, f_{crest}
1: Kite mass
m_k
m_k
2,5→4: Optimizer
Δl, C_L, v_k, R_p, β_p, γ_p
$P_{e,avg}$
l_t, d_t, W_l, $P_{m,o}$, E_{sto}, t_{cycle}
$P_{e,avg}$
3: Cycle power
h_p, l_t, W_l, $P_{m,o}$
$c_{1,2,...n}$
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