GHKT → Chazel Debugging Pre-flight Checklist

1) CES vs. elasticity: Ensure ρ is the substitution parameter, not elasticity σ. Handle ρ→0 carefully (Cobb–Douglas case).

2) Full depreciation toggles: If using full depreciation per period, set capital/mineral stock transitions accordingly and avoid double-counting.

3) Recycling stock law of motion: Check Ms_{t+1} = Ms_t + mp_t is implemented correctly, without adding ms_t again.

4) Bounds and feasibilities: Enforce constraints like $0 \le E1_t \le R1_t$, $mp_t \le Mp_t$, $0 \le ms_t \le Ms_t$, and total labor feasibility.

5) Unit scaling and productivity terms: Ensure A3_t, A2_t, Ap_t, As_t, ψ, κ's are consistent in units. Scaling mismatches cause instability.

6) Climate/carbon accumulation: Verify discretization of carbon cycle and depreciation kernel alignment with period length.

7) Oil/coal/clean energy aggregator: Confirm energy efficiencies (κ1, κ2, κ3) are applied consistently inside the CES.

8) Solver setup: Use sensible initial guesses, enforce correct time step length, and check β scaling. Verify all Lagrange multipliers appear in FOCs with correct signs.

9) Turning off labor: If abstracting from labor, fix it as constant and drop labor allocation decisions, feasibility constraint, and related FOCs.