Quick start instructions for the use of Western Australia's Green Steel Opportunity Model

Note: Detailed Green Steel model instructions and background can be found at <u>MRIWA GREEN</u> <u>STEEL</u> section of the MRIWA WEB Service.

- Email register with a valid Email address which will be confirmed by our email hosting service. See MRIWA web service for further log in issues. Access is normally a function of an independent email service.
- 2. See Disclaimer for terms of service of model and agree on log in. The model intended as a free tool to help understand green steel opportunity in Western Australia. An advanced user section is under development. Any suggestions please use EOI page or direct contact as above.
- 3. Model scenarios from drop down list. The scenarios are numbered as per the green steel opportunity report for reference. The list of scenarios is as listed below

Scenario 1a	Scenario 1b	Scenario 1c	Scenario 1d	Scenario 1e	Scenario 1f	Scenario 1g		
Brown Iron Ore - Rail, Haematite, 1mtpa	Brown Iron Ore - Rail, Haematite, 10mtpa	Brown Iron Ore - Rail, Haematite, 50mtpa	Brown Iron Ore - Rail, Mangetite, 1mtpa	Brown Iron Ore - Rail, Mangetite, 10mtpa	Brown Iron Ore - Rail, Mangetite, 50mtpa	Brown Iron Ore - no costs - Rail, Haematite, 50mtpa		
Scenario 2a	Scenario 2a1	Scenario 2b	Scenario 2b1	Scenario 3a	Scenario 3b	Scenario 3c	Scenario 3	
Green Iron Ore - Rail, Haematite, 50mtpa	Green Iron Ore - Rail, Magnetite, 50mtpa	Green Iron Ore - Rail, Haematite, 1mtpa iron ore shipped	Green Iron Ore - Rail, Magnetite, 1 mpta concentrate shipped	Brown Iron Ore Feed - Rail, Magnetite, 50mtpa	Bronw Iron Ore Feed w/ Green Agg - Rail, Magnetite, 50mtpa	Bronw Iron Ore Feed w/ Green Agg and Bene - Rail, Magnetite, 50mtpa	Brown Iron Ore Feed - Rail, Haematite, 50mtpa	
Scenario 4a	Scenario 4b	Scenario 4c	Scenario 5	Scenario 5a	Scenario 5b			
Green Iron Ore Feed - Rail, Magnetite, 50mtpa	Green Iron Ore Feed - Rail, Haematite, 1mtpa lump/pellets shipped	Green Iron Ore Feed - Rail, Magnetite, 1mpta pellets shipped	Brown Iron (Pig Iron) - Rail, Haematite, 50mtpa	Brown Iron NG (Pig Iron) - Rail, Haematite, 50mtpa	Brown Iron (Pig Iron) - Rail, Magnetite, 50mtpa			
Scenario 6	Scenario 6a	Scenario 6a1	Scenario 6a2	Scenario 6a3	Scenario 6b	Scenario 6b1	Scenario 6c	Scenario 6d
Scenario 6 Green Iron (HBI) - Rail, Haematite, 50mtpa	Scenario 6a Partial Green Iron (NG- Shaft w/ ren power) - Rail, Haematite, 50mtpa	Scenario 6a1 Partial Green Iron (NG- Shaft w/ ren power) - Rail, Magnetite, 50mtpa	Scenario 6a2 Partial Green Iron (NG-Shaft w/ ren power) - Rail, Haematite,	Scenario 6a3 Partial Green Iron (NG- Shaft w/ ren power) - Rail, Magnetite, 1mtpa HBI shipped	Scenario 6b Green Iron (HBI) - Rail, Magnetite, 50mtpa	Scenario 6b1 ACIL Scenario 1 Green Iron (HBI) - Rail, Magnetite	Scenario 6c Green Iron (HBI) - Rail, Haematite, 1 mtpa HBI shipped	Scenario 6d Green Iron (HBI) - Rail, Magnetite, 1 mtpa HBI shipped
Scenario 6 Green Iron (HBI) - Rail, Haematite, 50mtpa Scenario 9a	Scenario 6a Partial Green Iron (NG- Shaft w/ ren power) - Rail, Haematite, 50mtpa Scenario 9b	Scenario 6a1 Partial Green Iron (NG- Shaft w/ ren power) - Rail, Magnetite, 50mtpa Scenario 9c	Scenario 6a2 Partial Green Iron (NG-Shaft w/ ren power) - Rail, Haematite, Scenario 9c1	Scenario 6a3 Partial Green Iron (NG- Shaft w/ ren power) - Rail, Magnetite, 1mtpa HBI shipped Scenario 9d	Scenario 6b Green Iron (HBI) - Rail, Magnetite, 50mtpa Scenario 9e	Scenario 6b1 ACIL Scenario 1 Green Iron (HBI) - Rail, Magnetite Scenario 9f	Scenario 6c Green Iron (HBI) - Rail, Haematite, 1 mtpa HBI shipped Scenario 9g	Scenario 6d Green Iron (HBI) - Rail, Magnetite, 1 mtpa HBI shipped
Scenario 6 Green Iron (HBI) - Rail, Haematite, 50mtpa Scenario 9a Brown Steel (BOF) - Rail, Haematite, 1mtpa	Scenario 6a Partial Green Iron (NG- Shaft w/ nen power) - Rail, Haematite, 50mtpa Scenario 9b Brown Steel (BOF) - Rail, Haematite, 10mtpa	Scenario 6a1 Partial Green Iron (NG- Shaft w/ ren power) - Rail, Magnetite, 50mtpa Scenario 9c Brown Steel (BOF) - Rail, Haematite, 50mtpa	Scenario 6a2 Partial Green Iron (NG-Shaft w/ ren power) - Rail, Haematite, Scenario 9c1 Brown Steel (BOF) - Rail, Magnetite, 50mtpa	Scenario 6a3 Partial Green Iron (NG- Shaft w/ ren power) - Rail, Magnetite, 1mtpa HBI shipped Scenario 9d Partial Green Steel (NG-Shaft, EAF ren power) - Rail, Haematite,	Scenario 6b Green Iron (HBI) - Rail, Magnetite, 50mtpa Scenario 9e Partial Green Steel (NG-Shaft w/ ren power, EAF ren power)	Scenario 6b1 ACIL Scenario 1 Green Iron (HBI) - Rail, Magnetite Scenario 9f Partial Green Steel (NG- Shaft w/ ren power, EAF fossil power) - Rail, Haematite, 50mtpa	Scenario 6c Green Iron (HBI) - Rail, Haematite, 1 mtpa HBI shipped Scenario 9g Partial Green Steel (NG-Shaft w/ ren power, EAF fossil power)	Scenario 6d Green Iron (HBI) - Rail, Magnetite, 1 mtpa HBI shipped
Scenario 6 Green Iron (HBI) - Rail, Haematite, 50mtpa Scenario 9a Brown Steel (BOF) - Rail, Haematite, 1mtpa Scenario 10a	Scenario 6a Partial Green Iron (NG- Shaft w/ ren power) - Rail, Haematite, 50mtpa Scenario 9b Brown Steel (BOF) - Rail, Haematite, 10mtpa Scenario 10a1	Scenario 6a1 Partial Green Iron (NG- Shaft w/ ren power) - Rail, Magnetite, 50mtpa Scenario 9c Brown Steel (BOF) - Rail, Haematite, 50mtpa Scenario 10b	Scenario 6a2 Partial Green Iron (NG-Shaft w/ ren power) - Rail, Haematite, Scenario 9c1 Brown Steel (BOF) - Rail, Magnetite, 50mtpa Scenario 10b1	Scenario 6a3 Partial Green Iron (NG Shaft w/ ren power) - Rail, Magnetite, 1mtpa HBI shipped Scenario 9d Partial Green Steel (NG-Shaft, EAF ren power) - Rail, Haematite, Scenario 10b2	Scenario 6b Green Iron (HBI) - Rail, Magnetite, 50mtpa Scenario 9e Partial Green Steel (NG-Shaft w/ ren power, EAF ren power) Scenario 10c	Scenario 6b1 ACIL Scenario 1 Green Iron (HBI) - Rail, Magnetite Scenario 9f Partial Green Steel (NG- Shaft w/ ren power, EAF fossil power) - Rail, Haematite, 50mtpa	Scenario 6c Green Iron (HBI) - Rail, Haematite, 1 mtpa HBI shipped Scenario 9g Partial Green Steel (NG-Shaft w/ ren power, EAF fossil power)	Scenario 6d Green Iron (HBI) - Rail, Magnetite, 1 mtpa HBI shipped

- 4. Ten basic inputs for each scenario can be modified. This allows for comparison of one scenario with different inputs or multiple scenarios with default or amended inputs.
- 5. By clicking compare the outputs of the model are displayed. The values of any graphs can be seen by moving cursor for query of any values.
- 6. The output can be saved in a PDF format for download. On exiting the model or changing pages the output is lost and the compare button must generate the outputs again or generate new outputs.
- 7. Access to the model is recorded in terms of anonymous metrics relating to number of log ins and log in duration. No addition information about usage or outputs is recorded.
- 8. The database for the model is based on analysis of inputs in Western Australia for Pilbara, Midwest and Southern Districts of WA. The data on costs and capital are estimates only. They also may not be applicable outside of WA or these regions. They are most applicable to data from 2022. The applicability of the data to a given project or regions is subject to the terms of the disclaimer included with the model. They should not be used in a commercial nature or as for commercial gain without the permission of MRIWA.
- 9. If the model is not behaving as expected then consider closing the internet browser and restarting model session. If issues persist then MRIWA can assist but without obligations or guarantee that the issue can be resolved.