IEA Critical Minerals Dataset (GCMO2026) — Material demand — Nickel

record 0
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8068060278892517, "year": 2035}
record 1
{"case": "Comeback of high Cd-Te technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.701807975769043, "year": 2035}
record 2
{"case": "Wider adoption of perovskite solar cells", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8068060278892517, "year": 2035}
record 3
{"case": "Wider adoption of Ga-As technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8100969791412354, "year": 2035}
record 4
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8282989859580994, "year": 2040}
record 5
{"case": "Comeback of high Cd-Te technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.6731240153312683, "year": 2040}
record 6
{"case": "Wider adoption of perovskite solar cells", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8282989859580994, "year": 2040}
record 7
{"case": "Wider adoption of Ga-As technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8317980170249939, "year": 2040}
record 8
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8479819893836975, "year": 2045}
record 9
{"case": "Comeback of high Cd-Te technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.6707749962806702, "year": 2045}
record 10
{"case": "Wider adoption of perovskite solar cells", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8479819893836975, "year": 2045}
record 11
{"case": "Wider adoption of Ga-As technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8527269959449768, "year": 2045}
record 12
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8468940258026123, "year": 2050}
record 13
{"case": "Comeback of high Cd-Te technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.6494789719581604, "year": 2050}
record 14
{"case": "Wider adoption of perovskite solar cells", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8468940258026123, "year": 2050}
record 15
{"case": "Wider adoption of Ga-As technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8530719876289368, "year": 2050}
record 16
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Grid battery storage", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 27.556699752807617, "year": 2025}
record 17
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Grid battery storage", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 71.41719818115234, "year": 2030}
record 18
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Grid battery storage", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 134.47500610351562, "year": 2035}
record 19
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Grid battery storage", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 199.08799743652344, "year": 2040}
record 20
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Grid battery storage", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 286.5769958496094, "year": 2045}
record 21
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Grid battery storage", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 382.4259948730469, "year": 2050}
record 22
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Electric vehicles", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 438.82501220703125, "year": 2025}
record 23
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 52.11759948730469, "year": 2025}
record 24
{"case": "Constrained rare earth elements supply", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 52.40810012817383, "year": 2025}
record 25
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 67.36209869384766, "year": 2030}
record 26
{"case": "Constrained rare earth elements supply", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 68.86209869384766, "year": 2030}
record 27
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Electric vehicles", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 988.5390014648438, "year": 2030}

record 28
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Electric vehicles", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 1536.3199462890625, "year": 2035}
record 29
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Electric vehicles", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 1850.510009765625, "year": 2040}
record 30
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Electric vehicles", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 2019.5699462890625, "year": 2045}
record 31
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 56.78630065917969, "year": 2035}
record 32
{"case": "Constrained rare earth elements supply", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 59.133201599121094, "year": 2035}
record 33
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 49.26169967651367, "year": 2040}
record 34
{"case": "Constrained rare earth elements supply", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 51.1515007019043, "year": 2040}
record 35
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Electric vehicles", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 2053.570068359375, "year": 2050}
record 36
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Hydrogen technologies", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 2.3133299350738525, "year": 2025}
record 37
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Hydrogen technologies", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 4.714930057525635, "year": 2030}
record 38
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Hydrogen technologies", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 5.192870140075684, "year": 2035}
record 39
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Hydrogen technologies", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 4.0925798416137695, "year": 2040}
record 40
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Hydrogen technologies", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 3.9290900230407715, "year": 2045}
record 41
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Hydrogen technologies", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 5.36722993850708, "year": 2050}
record 42
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other low emissions power generation", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 103.51909637451172, "year": 2025}
record 43
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other low emissions power generation", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 275.2803039550781, "year": 2030}
record 44
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other low emissions power generation", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 302.4748840332031, "year": 2035}
record 45
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other low emissions power generation", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 298.8429870605469, "year": 2040}
record 46
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other low emissions power generation", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 288.7743225097656, "year": 2045}
record 47
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other low emissions power generation", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 254.3134002685547, "year": 2050}
record 48
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 55.339698791503906, "year": 2045}
record 49
{"case": "Constrained rare earth elements supply", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 57.975101470947266, "year": 2045}
record 50
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 65.25370025634766, "year": 2050}
record 51
{"case": "Constrained rare earth elements supply", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Wind", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 68.45939636230469, "year": 2050}
record 52
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other uses", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 2906.2587890625, "year": 2025}
record 53
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other uses", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 3055.306640625, "year": 2030}
record 54
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other uses", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 3255.387451171875, "year": 2035}
record 55
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other uses", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 3428.759521484375, "year": 2040}
record 56
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other uses", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 3593.913818359375, "year": 2045}
record 57
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Other uses", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 3745.93212890625, "year": 2050}
record 58
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "regi

on": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.7223039865493774, "year": 2025}
record 59
{"case": "Comeback of high Cd-Te technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "pro
duct": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.7010980248451233, "yea
r": 2025}
record 60
{"case": "Wider adoption of perovskite solar cells", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO202
6", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.72230398654937
74, "year": 2025}
record 61
{"case": "Wider adoption of Ga-As technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "pr
oduct": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.723222017288208, "yea
r": 2025}
record 62
{"case": "Base Case", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "product": "Solar PV", "regi
on": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8225989937782288, "year": 2030}
record 63
{"case": "Comeback of high Cd-Te technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "pro
duct": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.7506060004234314, "yea
r": 2030}
record 64
{"case": "Wider adoption of perovskite solar cells", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO202
6", "product": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.8225989937782288, "year": 2030}
record 65
{"case": "Wider adoption of Ga-As technology", "category": "Material demand", "flow": "IDLE", "material": "Nickel", "mcm": "GCMO2026", "pr
oduct": "Solar PV", "region": "World", "scenario": "Stated Policies Scenario", "unit": "Thousand tonnes", "value": 0.825094997882843, "yea
r": 2030}