

Green Mobile Networks & Base Stations

Scenarios & Forecasts 2009-2014



List of Forecasts

All forecasts are for 2009-2014 and include 2008 historical estimates, except where noted below.

Regional forecasts cover 8 regions: North America, South America, Western Europe, Eastern Europe, Far East & China, Indian Sub Continent, Rest of Asia Pacific and Africa & Middle East.

Mobile User Base

Mobile Subscriber Base (m) Split by 8 Key Regions, 2007-2014

Average Number of Subscribers Per Active Base Station Split by 8 Key Regions, 2007-2014

Total Number of Active Base Stations (m) Split by 8 Key Regions, 2007-2014

Base Station Deployments

Incremental Scenario - Base Station Deployments Per Annum Split by 8 Key Regions

Progressive Scenario - Base Station Deployments Per Annum Split by 8 Key Regions

Transformational Scenario - Base Station Deployments Per Annum Split by 8 Key Regions

Incremental Scenario - Percentage of Deployed Base Stations Which Utilise Renewable Energy Split by 8 Key Regions

Progressive Scenario - Percentage of Annual Deployments of Base Stations Which Utilise Renewable Energy Split by 8 Key Regions

Transformational Scenario - Percentage of Annual Deployments of Base Stations Which Utilise Renewable Energy Split by 8 Key Regions

Incremental Scenario - Annual Deployments of Base Stations Which Utilise Renewable Energy Split by 8 Key Regions

Progressive Scenario - Annual Deployments of Base Stations Which Utilise Renewable Energy Split by 8 Key Regions

Transformational Scenario - Annual Deployments of Base Stations Which Utilise Renewable Energy Split by 8 Key Regions

Green Electricity

Incremental Scenario - Percentage of Total Base Station Electricity Generated by Off-Grid Renewable Resources Split by 8 Key Regions

Progressive Scenario - Percentage of Total Base Station Electricity Generated by Off-Grid Renewable Resources Split by 8 Key Regions

Transformational Scenario - Percentage of Total Base Station Electricity Generated by Off-Grid Renewable Resources Split by 8 Key Regions

Incremental Scenario - Annual Power Generation (GWh) from Off-Grid Renewable Resources Split by 8 Key Regions

Progressive Scenario - Annual Power Generation (GWh) from Off-Grid Renewable Resources Split by 8 Key Regions

Transformational Scenario - Annual Power Generation (GWh) from Off-Grid Renewable Resources Split by 8 Key Regions

CO2 Emissions

Emissions from Grid Electricity

Incremental Scenario - CO2 Emissions (kg/kWh) of Base Station Grid Electricity Split by 8 Key Regions

Progressive Scenario - CO2 Emissions (kg/kWh) of Base Station Grid Electricity Split by 8 Key Regions

Transformational Scenario - CO2 Emissions (kg/kWh) of Base Station Grid Electricity Split by 8 Key Regions
 Incremental Scenario - On-Grid Base Stations, CO2 Emissions (Mt) Split by 8 Key Regions
 Progressive Scenario - On-grid Base Stations, CO2 Emissions (Mt) Split by 8 Key Regions
 Transformational Scenario - On-Grid Base Stations, CO2 Emissions (Mt) Split by 8 Key Regions

Emissions from Off-Grid Electricity

Incremental Scenario - Percentage of Base Station Electricity Derived from Diesel-Powered Off-Grid Generators Split by 8 Key Regions
 Progressive Scenario - Percentage of Base Station Electricity Derived from Diesel-Powered Off-Grid Generators Split by 8 Key Regions
 Transformational Scenario - Percentage of Base Station Electricity Derived from Diesel-Powered Off-Grid Generators Split by 8 Key Regions
 Incremental Scenario - Base Station Electricity (GWh) Derived from Diesel-Powered Off-Grid Generators Split by 8 Key Regions
 Progressive Scenario - Base Station Electricity (GWh) Derived from Diesel-Powered Off-Grid Generators Split by 8 Key Regions
 Transformational Scenario - Base Station Electricity (GWh) Derived from Diesel-Powered Off-Grid Generators Split by 8 Key Regions,
 Incremental Scenario - Off-Grid Base Stations, CO2 Emissions (Mt) Split by 8 Key Regions
 Progressive Scenario - Off-Grid Base Stations, CO2 Emissions (Mt) Split by 8 Key Regions
 Transformational Scenario - Off-Grid Base Stations, CO2 Emissions (Mt) Split by 8 Key Regions

Total Base Station CO2 Emissions

Incremental Scenario - Total Base Station CO2 Emissions (Mt) Split by 8 Key Regions
 Progressive Scenario - Total Base Station CO2 Emissions (Mt) Split by 8 Key Regions
 Transformational Scenario - Total Base Station CO2 Emissions (Mt) Split by 8 Key Regions
 CO2 Emissions (Mt) from Base Station Electricity Split by Scenario

CO2 Emissions per Mobile Subscriber

Base Station CO2 Emissions (kg) Per Mobile Subscriber Split by Scenario

Implied Cost of Base Station Electricity

Global Average Implied Cost of Base Station Electricity Split by Source (Grid Electricity, Off-Grid Renewable, Off-Grid Non-Renewable).

Power Output

Incremental Scenario. Average Power Output Per Base Station (W) Split by 8 Key Regions
 Progressive Scenario - Average Power Output Per Base Station (W) Split by 8 Key Regions
 Transformational Scenario - Average Power Output Per Base Station (W) Split By 8 Key Regions
 Incremental Scenario - Total Mobile Base Station Power Consumption (GWh) Split by 8 Key Regions
 Progressive Scenario - Total Mobile Base Station Power Consumption (GWh) Split by 8 Key Regions
 Transformational Scenario - Total Mobile Base Station Power Consumption (GWh) Split by 8 Key Regions

Cost of Electricity

Incremental Scenario - Implied Cost per kWh (\$) of Base Station Electricity Split by 8 Key Regions
 Progressive Scenario - Implied Cost per kWh (\$) of Base Station Electricity Split by 8 Key Regions

Transformational Scenario - Implied Cost per kWh (\$) of Base Station Electricity Split by 8 Key Regions

Incremental Scenario - Total Operator Base Station Electricity Costs (\$m) Split by 8 Key Regions

Progressive Scenario - Total Operator Base Station Electricity Costs (\$m) Split by 8 Key Regions

Transformational Scenario - Total Operator Base Station Electricity Costs (\$m) Split by 8 Key Regions

Incremental Scenario - Total Electricity Costs in Relation to Operator-Billed Revenues (%) by 8 Key Regions

Progressive Scenario - Total Electricity Costs in Relation to Operator-Billed Revenues (%) Split by 8 Key Regions

Transformational Scenario - Total Electricity Costs in Relation to Operator-Billed Revenues (%) Split by 8 Key Regions

Base Station Electricity Costs (\$m) Split by Scenario

Base Station Electricity Usage by Mobile Subscriber

Base Station Electricity Usage (kWh) Per Mobile Subscriber Per Annum Split by Scenario