

# ExtendWeather Seasonal Forecast for the Energy Sector



ExtendWeather generates accurate seasonal forecasts on the climate situation globally and locally to help energy operators to understand energy demand and generation schedules; an extreme climate forecast helps portfolio managers to maximize returns, hedge downside risks and develop superior investment strategies.

## Featured Seasonal Forecast Products

ExtendWeather is dedicated to the delivery of practical forecast indicators to the energy sector beyond industry standard precipitation and temperature anomalies:

- Heating/cooling degree day (HDD/CDD)
- Standardised Precipitation Index
- River flow
- Wind run
- Watts of solar radiation

## Indicators for Energy Risk Management

The nation's energy companies comprise one of the key primary sector activities engaging the private sector meteorology industry. Weather is a primary driver for commodity prices in energy, having an impact on both energy production and consumption. Improved forecasts on sub-seasonal timescales supports hedging for anticipated energy demand, managing and protecting distribution and transmission infrastructure, and weather-related energy trading opportunities and risks. The growth of renewable energy is providing new challenges and opportunities for applications of weather and climate forecasts.



On sub-seasonal timescales, probabilistic predictions of wind, solar and hydropower generation can help stabilize energy costs and supply by improving scheduling and trading, maintenance scheduling, reducing curtailments and imbalance penalties, improving decisions about reserve energy sources, maximizing grid integration, and planning capacity commitments. Specific groups from the commercial sector that would benefit from sub-seasonal forecasts include energy trading firms, regional power generators/suppliers, and investors.

## Modelling and Data Provision

ExtendWeather scientists can provide modelling and tool development services to answer clients' particular operational and planning questions.

We can also deliver data packages that are customized to seamlessly integrate with clients' models for speedy ingestion of new information for timely analysis.



# ExtendWeather Seasonal Forecast

## Innovative sciences, customized solutions



**Seasonal Forecasts** – Our monthly forecasts and 10 day (or biweekly) advisories keep you abreast of the latest model guidance and potential changes to the forecast.

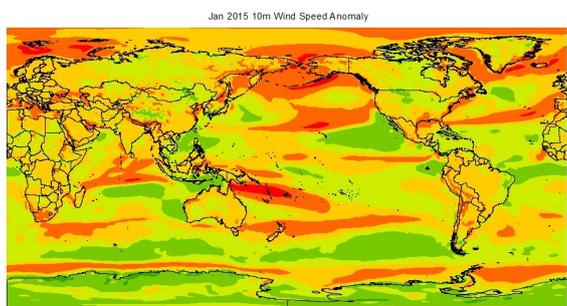
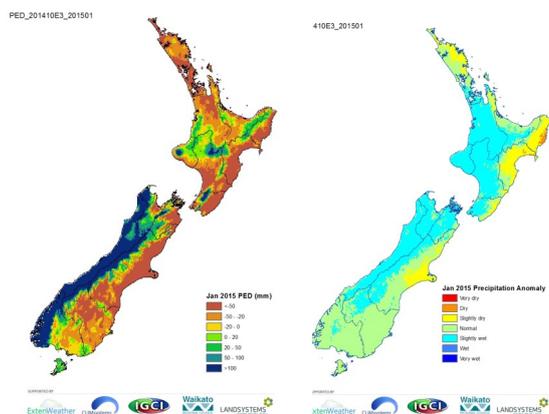
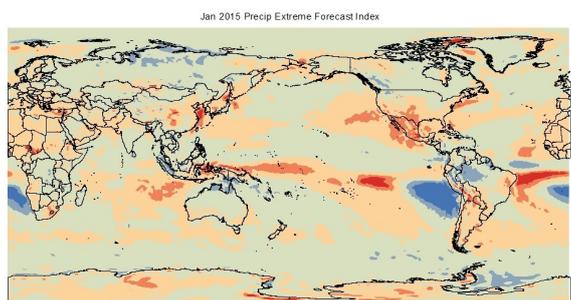
**Intelligence** –The Seasonal Forecast leverages the valuable (and not widely distributed) data from the second version of the NCEP (National Centre for Climate Predictions) Climate Forecast System (CFSv2). It provides a probabilistic forecast of up to nine months with customized practical indicators for the agricultural sector. This forecast also discusses teleconnection indexes and other global circulation phenomenon such as El Niño/La Niña.

**Practical and Comprehensive** – ExtendWeather provides detailed one to nine month customized forecast indicators beside traditional temperature and precipitation forecasts. Including wind and solar radiation and derived products such as drought and wet period onsets, extreme forecast index (EFI), and potential evapotranspiration index (PED).

**Proprietary Models** – ExtendWeather develops a different approaches and models, considers ENSO, sea level pressure anomalies and temperature trend and applies a scientifically robust downscaling technique.

## About ExtendWeather

ExtendWeather is a brand of CLIMsystems Ltd. With the support from local council, industries, and international institutes and experts, ExtendWeather is able to provide a public website for general seasonal climate forecast products and a subscription service for digital provision of forecast data along with customized services and solutions to energy industry clients.



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