As countries develop and economies grow, demand for resources is ever increasing. As one of the world’s leading providers of gases, we are helping companies and communities achieve more with the resources at hand. Used ingeniously, gases like oxygen, nitrogen and hydrogen can boost quality and productivity in everything from food to fuel while reducing energy consumption and emissions. At Praxair, we are proud that our gases and technologies help make companies and communities more sustainable. Our enduring value to the customers we serve, the people we employ, and the communities that support us is this: we are making our planet more productive.

Praxair is the largest industrial gases company in North and South America, and one of the largest worldwide, with 2011 sales of $11 billion. We operate in 50 countries worldwide, serving one million customers and a wide range of industries, including energy, manufacturing, chemicals, metals, healthcare and more.

To learn more about Praxair’s nitrogen gas injection services, go to www.praxair.com or call 1-800-PRAXAIR. Then ask Praxair to assist with a field assessment, so you can start getting more oil, from more places, more affordably.
Both CO₂ and N₂ injection in oil or gas reservoirs can grow your current reserves. Enhanced oil and gas recovery methods have been in use for years. But many common methods have serious shortcomings, both in terms of cost and applicability. Enhanced oil and gas recovery (EOR) with Praxair’s nitrogen gas injection process or CO₂ supply, however, are cost-effective, field-proven and versatile.

Nitrogen from Air. Increased Versatility.
Praxair can design, build, own and operate a complete on-site air separation plant – in any field.

Nitrogen Injection
Nitrogen inerting is a proven, cost-effective, versatile and smart way to get more from your fields. Nitrogen is an inert, non-corrosive and oxygen-free gas, so there are minimal problems with equipment maintenance and repair. CO₂ is a well established EOR solvent with industry standard field handling procedures.

Stages of Reserve Growth

Using proven technology, a Praxair plant can provide N₂ at the pressure and purity which your project needs. Also Praxair will work with oil companies to necessary CO₂ volumes for EOR floods.

Tap into our expertise.
Praxair has more than 30 years experience in nitrogen gas injection for EOR. We’ve provided turnkey installations in North and South America, including the second largest nitrogen plant in the world.

We can assist with preliminary screening studies to determine the suitability of nitrogen gas injection for your field. We’ll also determine the optimum supply option, injection pressure and drive system (electric or gas). Praxair offers superior project execution for pilot projects, field tests and full-scale operations.

Cost-effective technology for a number of applications.

1. Gas Assisted Gravity Drainage
Low density nitrogen can enhance the gravity drainage of a steeply dipping reservoir. In deep reservoirs, gravity stable miscible displacement could be achieved with nitrogen.

2. Miscible Displacement
Whether your reservoir is miscible with N₂ or CO₂, these solvents can be used to drive an oil bank toward a producing well. Praxair can work with your company to supply these gases for pilot or full-field floods.

3. Pressure Maintenance
By injecting nitrogen to displace gas cap gas, saleable natural gas is recovered and reservoir pressure is maintained. This allows producers to gain today’s attractive price for natural gas, without waiting for oil depletion. Reserve growth from condensate recovery can also be attained.

4. Immiscible Displacement
Immiscible displacement can swell oil, decrease viscosity and change relative permeability to increase oil production.