Ammonia production: moving towards maximum efficiency and lower GHG emissions

Why is ammonia so energy intensive?
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How much energy does the ammonia sector consume?
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The fertilizer industry has made great strides
Large gains in energy efficiency in ammonia production have been achieved over the past 30 years. Ammonia plants have been equipped with the most advanced available technologies, leading to enhanced plant throughput and lower overall energy consumption and reduced CO₂ emissions. For example, a typical nitrogen plant built today typically uses 30% less energy per tonne of ammonia produced than one constructed 40 years ago (IFA).

IFA tracks progress in ammonia plant efficiency and CO₂ emissions to encourage members to improve their performance. The latest Association benchmark report indicates that the most efficient plants are performing close to maximum efficiency and that incremental advances in energy efficiency have resulted in significant reduction in greenhouse gas (GHG) emissions by nearly all the plants surveyed.