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## Environment and Ammonia

John S. Scherer, LA Cold Storage



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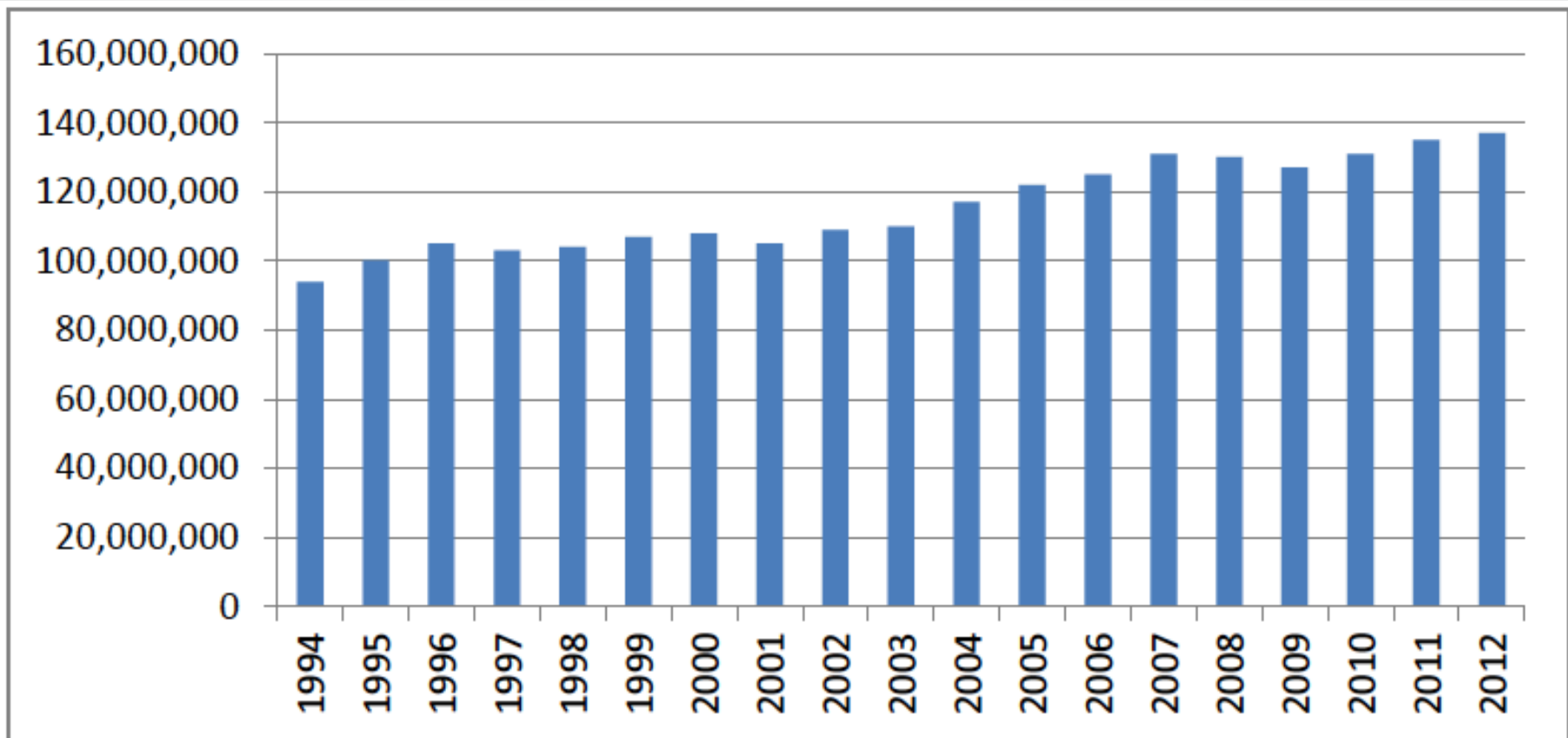
# The Environment and Ammonia

## The Environment and Ammonia Refrigeration



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# Global ammonia production (tons)



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# The Environment and Ammonia

Estimates published by third parties

1. 95% of ammonia on the planet is naturally created.
2. Lightening leads to creation of 20 to 40 Billion pounds of ammonia per year.
3. Alfalfa and soy bean crops produce over 500 Billion pounds of ammonia per year.
4. The human body can not function properly without producing ammonia. A person may produce 15 grams of ammonia per day. The population of California of over 40 million people, for example, may produce nearly 500 million pounds of ammonia per year.
5. It has been estimated 3 to 6 trillion pounds of ammonia is created on the planet each year.



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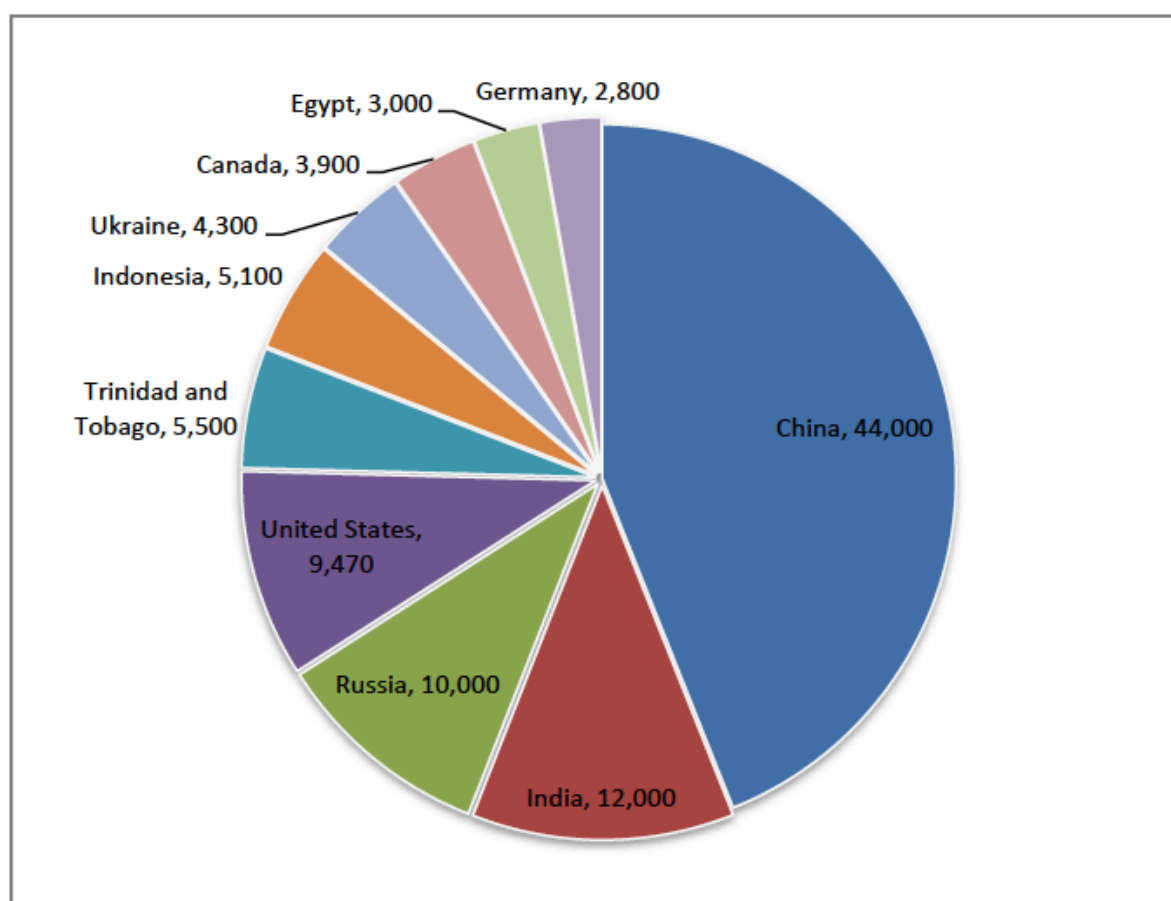
Estimates published by third parties

1. Global ammonia production by man is about 4 billion pounds per year.
2. Over 85% of ammonia produced by man is used as fertilizer and fertilizer related products.
3. Over 13% of ammonia produced by man is used in industrial processes and production of various products.
4. Ammonia used for refrigeration is in the less than 2% category of man made ammonia.
5. Assuming ammonia is replenished in refrigeration systems at a rate of 8% per year, ammonia refrigeration accounts for less than .16% of ammonia produced by man.
6. This .16% of man made ammonia accounts for a tiny percentage of one tenth of one percent of ammonia created on the planet each year.



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# Top Ten Global Ammonia Producers



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It all boils down to education,  
education, education.



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# Questions & Answers



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