

NERP

NITROUS OXIDE EMISSION REDUCTION PROTOCOL (NERP) FACTS AND IMPORTANT INFORMATION



NITROUS OXIDE (N₂O) IS A NATURAL ATMOSPHERIC GAS THAT COMES PRIMARILY FROM THE OCEANS AND SOILS. IT IS ALSO A GREENHOUSE GAS THAT HAS A GREATER IMPACT ON GLOBAL WARMING THAN CARBON DIOXIDE.



FERTILIZER USE IS ESTIMATED TO INDUCE 25-35% OF N₂O CROPLAND EMISSIONS.



THE CANADIAN FERTILIZER INSTITUTE HAS BEEN WORKING WITH SCIENTISTS TO DEVELOP NITROUS OXIDE EMISSION REDUCTION PROTOCOL (NERP)

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NERP IS DESIGNED TO REDUCE ON-FARM EMISSIONS OF NITROUS OXIDE IN A QUANTIFIABLE, CREDIBLE, AND VARIIFIABLE WAY.

ALBERTA IS THE FIRST CANADIAN PROVINCE TO APPROVE THE USE OF NERP IN ITS REGULATORY CARBON MARKETPLACE. WORK IS UNDERWAY TO HAVE IT ACCEPTED IN SASKATCHEWAN AND ONTARIO. BUT THE POTENTIAL DOES NOT END THERE. OTHER PARTS OF THE WORLD, INCLUDING THE UNITED STATES AND EUROPE, ARE SHOWING INTEREST IN NERP AS WELL.

WHY NERP?

FOR FARMERS



FOLLOWING NERP, FARMERS CAN USE NITROGEN IN FERTILIZER MORE EFFICIENTLY AND ECONOMICALLY ON THEIR FARM WHILE DOING THE RIGHT THING IN REDUCING GREENHOUSE GAS EMISSIONS.

FOR INDUSTRY

THE CANADIAN FERTILIZER INDUSTRY HAS LIMITED OPPORTUNITIES TO REDUCE GREENHOUSE GAS EMISSIONS FROM THE MANUFACTURING OF FERTILIZER. SUPPORTING N₂O REDUCTION AT THE FARM LEVEL IS A WAY FOR THE FERTILIZER INDUSTRY TO CONTRIBUTE TO REDUCTION OF GREENHOUSE GAS EMISSIONS.

FOR GOVERNMENT

MANY DEVELOPED COUNTRIES HAVE PLEDGED TO LIMIT OR REDUCE THEIR GREENHOUSE GAS EMISSIONS. A TOOL LIKE NERP COULD HELP GOVERNMENTS MEET THEIR COMMITMENTS.

FOR ENVIRONMENTAL GROUPS

THE OPPORTUNITY TO PARTNER WITH THE AGRICULTURAL COMMUNITY TO WORK TOWARDS THE SAME GOAL — REDUCTION OF GREENHOUSE GAS EMISSIONS, RESPONSIBLY.

FOR RESEARCHERS

NERP IS A SCIENCE-BASED TRANSFORMATIONAL TOOL. ASIDE FROM PROVIDING ALL OTHER STAKEHOLDERS WITH A SOLUTION TO THEIR NEEDS, NERP ALSO CREATES OPPORTUNITIES FOR RESEARCHERS TO ADVANCE NITROUS OXIDE SCIENCE.

SCIENCE CLUSTERS

RIGHT



SOURCE

RIGHT



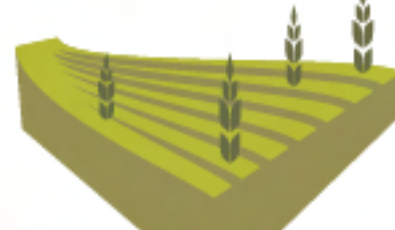
RATE

RIGHT



TIME

RIGHT



PLACE

THE CANADIAN FERTILIZER INSTITUTE IS ENGAGED IN REGIONAL RESEARCH THAT WILL MEASURE THE IMPACT THAT BEST MANAGEMENT PRACTICES HAVE ON REDUCING N₂O EMISSIONS IN CROP PRODUCTION.



THE AIM OF THE SCIENCE CLUSTER PROGRAM IS TO FURTHER REFINE THE SCIENTIFIC UNDERSTANDING OF N₂O EMISSIONS WHEN FARMERS ADOPT BEST MANAGEMENT PRACTICES. THE SCIENCE CLUSTER RESEARCH WILL HELP TO REDUCE THE CARBON FOOTPRINT OF CANADIAN FARMERS WHEN APPLYING FERTILIZER, WHILE HELPING FARMERS GET EVEN MORE VALUE FROM EVERY DOLLAR THEY SPEND ON CROP NUTRIENTS.

