

# The Western Arnhem Land Fire Management Agreement – history and significance

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# Outline

- background and context
- structure
  - what WALFA is and isn't
- relevant policy environment
  - international
  - national
  - regional
- options for accessing markets
- issues and challenges for WALFA+
  - in a carbon-trading world that doesn't understand fire



# Background

- need for improved fire management in Arnhem Land recognised independent of gas plant proposal
- Conoco-Phillips (DLNG) proposal for natural gas plant on outskirts of Darwin made in 1999
- loss of a small area of rainforest and mangroves an issue, as well as GHG emissions
- neither Territory nor Federal Government had law or policy requiring offset of GHG emissions
- connection to Arnhem Land made initially on fire damage to *Allosyncarpia* rainforests
  - proposed as offset



# Background

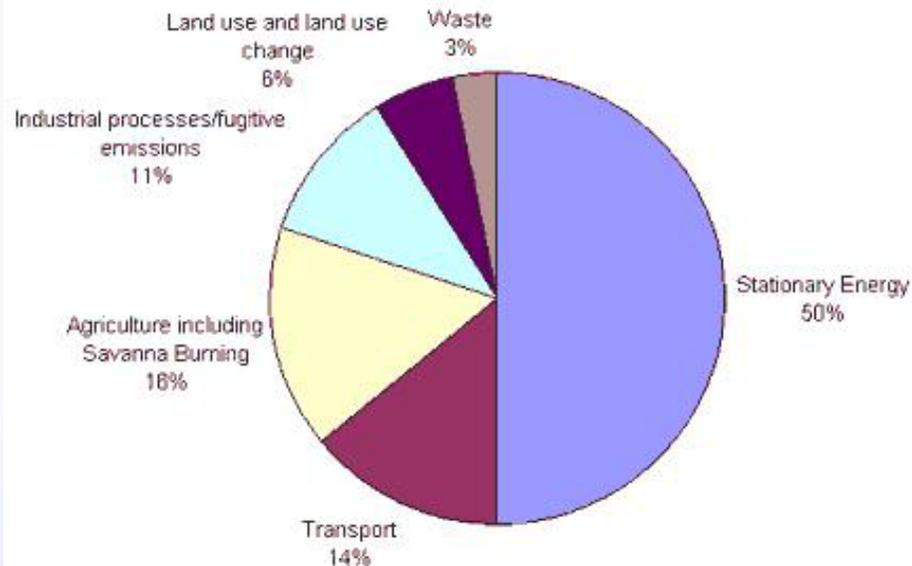
- DLNG commitment to consider GHG offsets during environmental assessment process
- Arnhem Land connection to GHG emissions made during the environmental assessment process
- DLNG licence condition to offset GHG emissions
- contractual agreement among DLNG, government and Northern Land Council (representing TOs) to cover
  - delivery of fire abatement services by Indigenous interests in region
  - payment of \$1 million pa by DLNG for services
  - target average (over 17 years) of 100,000 tonnes (CO<sub>2</sub>-e) pa reduction from a 10-year baseline



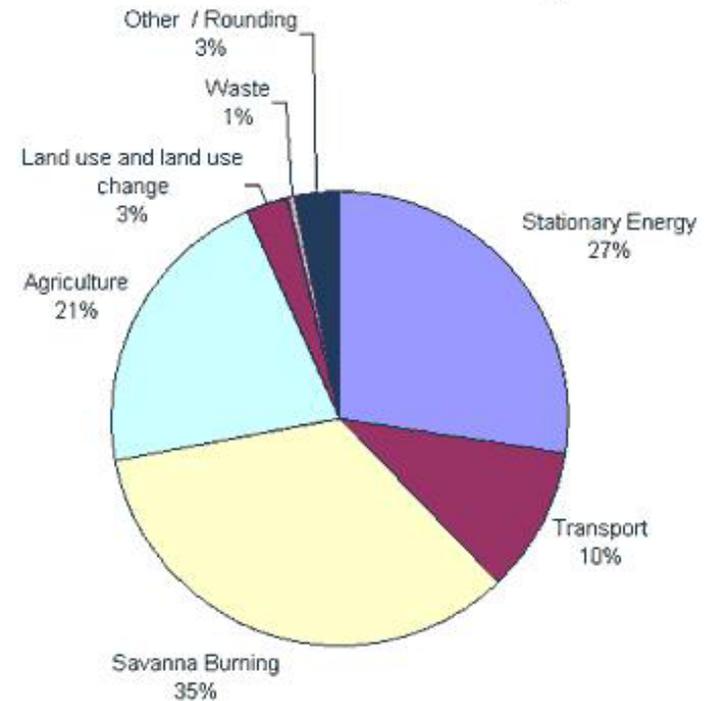
# Background – Northern Territory

- NT agricultural emissions relatively larger than other jurisdictions
  - including savanna fire, averaging 35% and up to 49% of total NT emissions

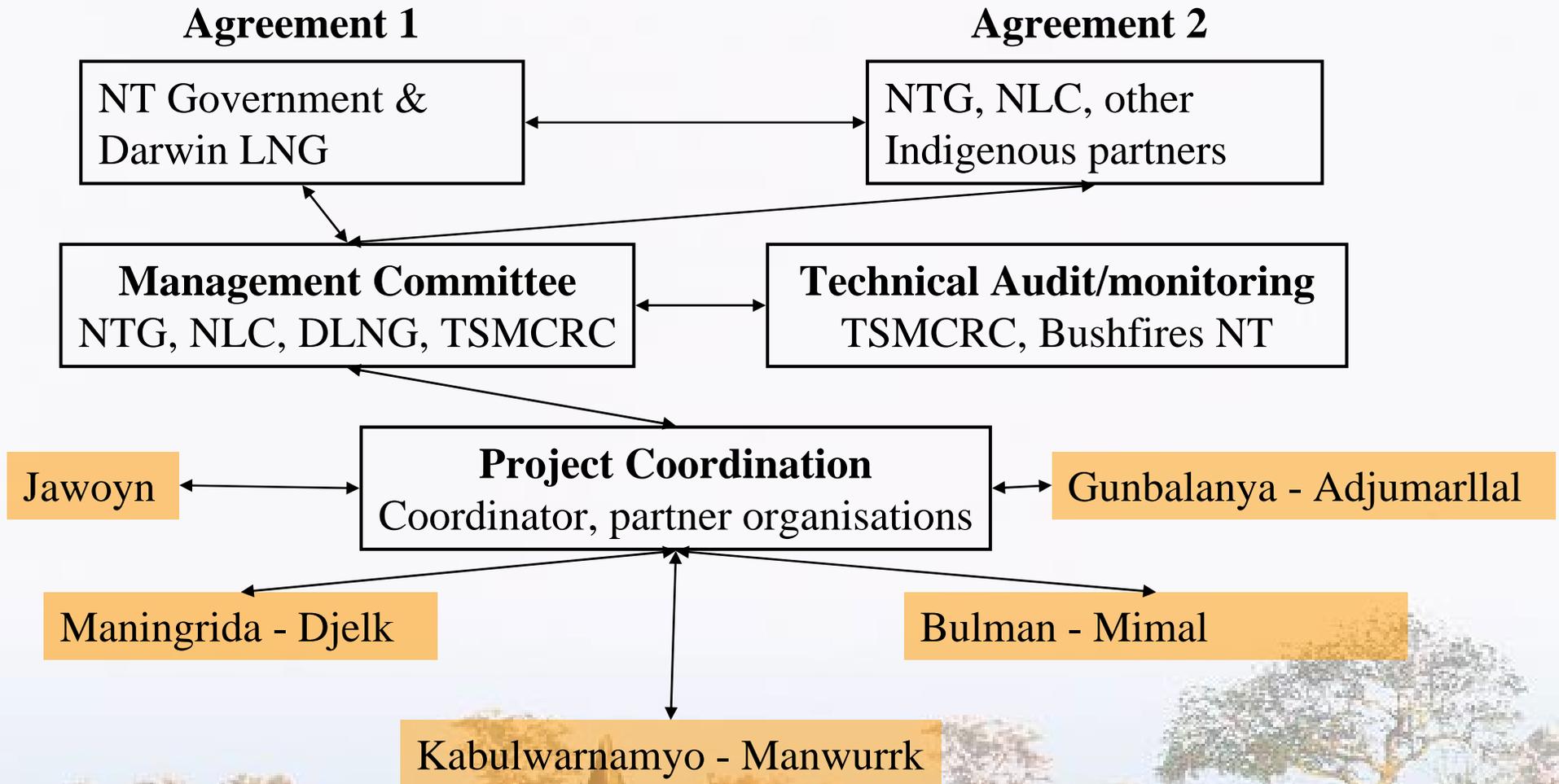
**Australian Greenhouse Gas Emissions 2005 by Sector**



**NT Greenhouse Gas Emissions 2005 by Sector**



# Background - WALFA



# Background WALFA

- WALFA is a loose collective
  - dependent on support from a range of organisations
  - delivering services in fire management under contract
  - performance measured in CO<sub>2</sub> equivalents
- WALFA is not an incorporated business
  - is not trading in carbon credits
  - is not engaging with markets
- But WALFA has delivered
  - over 3 years the project has exceeded targets
    - 420,000 tonnes reduction in GHG emissions
    - additional biodiversity and social benefits
  - at direct costs of <\$10 per tonne CO<sub>2</sub>-e



# Background WALFA

- and there is a great need for land management initiatives like WALFA
  - that stimulate local economic activity
  - that are compatible with interests of local people
  - that draw on skills additional to or instead of formal educational attainments
- 2006 census
  - little private sector activity
  - more people with no schooling than reach year 12
  - age structure reflects high fertility combined with premature adult mortality
  - dominant employment categories are labourer and community service work (totalling 63.2%)
  - median Indigenous adult incomes are \$185 to \$207 pw or 16% of average adult wage nationally
  - rates of increase in population of working age much higher than plausible increase in mainstream jobs



# Emerging policy environment

- international
  - treatment of land use remains ambiguous
  - fire treated as a source of uncertainty rather than of reliable reductions in emissions
  - savanna fire presently treated as agricultural emission
  - the permanency criterion: fire doesn't fit
  - changes in baselines are possible
  
  - recognition of importance of retaining forests may encourage more realistic treatment of land uses in general, including fire
  - Australia's influence on international settings uncertain



# Emerging policy environment

- national
  - an emissions trading system (ETS) to begin by 2010
  - policy and law for ETS to be in place by 2009
  - treatment of savanna fire in ETS uncertain
  - positive signals:
    - agriculture not likely to be in covered sectors initially
    - Garnaut study's statements favouring unlimited access to offsets from non-covered sectors, including agriculture
    - Rudd Government funding work to promote Indigenous access to carbon markets, focussing on fire
  - difficulties
    - desire to minimise exceptional treatment for any sector
      - special deals in one sector will increase costs elsewhere
    - conflict between exclusion of fire from covered sectors while treating fire abatement as robust source of tradeable credits
    - standards of validation/accreditation unclear



# Emerging policy environment

- Territory

- savanna fire recognised as one of few areas for northern Australia to contribute to lower national emissions
- increasing political recognition of fire management as key issue
- NT greenhouse policy will almost certainly emphasise fire abatement
- but uncertainty about NTG's capacity to influence national agenda



# Emerging policy environment

- On balance, likely that both Territory and national Governments will seek policy settings favouring recognition of savanna fire as
  - a source of emissions that can and should be actively mitigated
  - a potential source of tradeable credits for sectors covered and not covered by the national ETS
- WALFA participants need to be positioned to provide information and analysis throughout the frenetic policy development process



# Options for emissions trading

## Option 1: Direct coverage under a national ETS

### +ves

- economically efficient to include all sectors
- strong economic incentive to reduce fire emissions

### -ves

- liabilities for all fire
- complexity and high transaction costs
- poor fit to communal land ownership and customary practice
- inconsistency with non-commercial objectives for fire use
- potential to exacerbate Indigenous disadvantage
- may encourage too much removal of fire, conflicting with other environmental and production objectives



# Options for emissions trading

**Option 2: Direct coverage under a national ETS but with special treatment, such as free issue of initial permits**

## **+ves**

as for Option 1, and

- improved capacity of fire users to meet “average” fire emission costs

## **-ves**

as for Option 1, and

- risk of above permit liabilities in some years
- even greater complexity and transaction costs
- increased effort and demand on limited resources for no return
- reduced opportunities to trade



# Options for emissions trading

## Option 3: No direct coverage under the ETS but fire abatement eligible as offsets within ETS

### +ves

- no direct liabilities for fire use
- opportunities to trade with covered and uncovered sectors
- incentives to reduce fire-related emissions
- opportunities for Indigenous people from land ownership

### -ves

- arguments about equity
- less efficient than “pure” market
- may affect options for linking Australian ETS to overseas schemes



# Options for emissions trading

Option 4: No direct coverage under the ETS and ineligible for trade within national ETS, instead targets voluntary markets

## +ves

- no influence on status of national ETS
- opportunities to trade with uncovered sectors (e.g. international transport)
- incentives to reduce fire-related emissions retained
- greater potential to link GHG benefits to other environmental and social benefits to improve price in voluntary markets

## -ves

- smaller, potentially lower value market
- image (and price) may be more fragile



# Options for emissions trading

Option 5: No trade of credits in any market, but direct financial support to reduce emissions under “complementary measures”

## +ves

- no influence on status of national ETS
- incomes more predictable
- Government accepts risk of poor performance
- compatible with existing Government-supported programs

## -ves

- susceptible to poorly considered or ideologically-motivated policy shifts (e.g. in regard to outstations)
- continued dependence on government (not “real”, self-sustaining jobs)
- no incentives for development of independent enterprise



# Connecting with markets

- to build an independent business, WALFA participants will have to deal with
  - corporate structures
    - perhaps including formal cooperatives
    - requiring decisions on spatial scale and composition of cooperatives

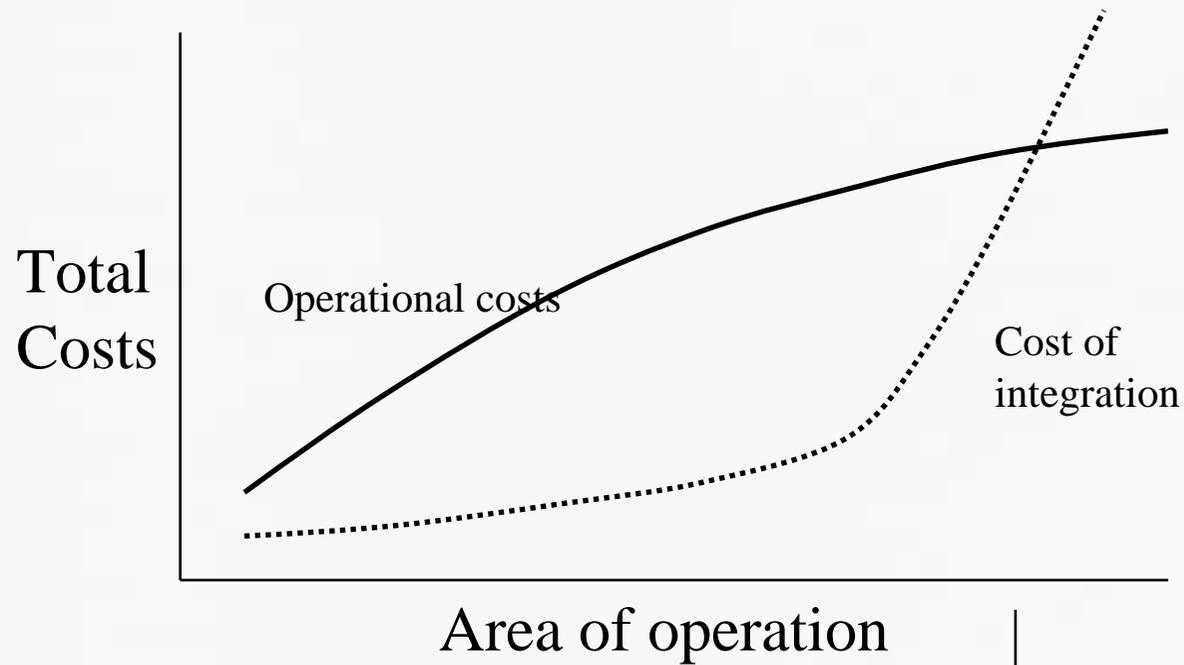


# Connecting with markets - challenges

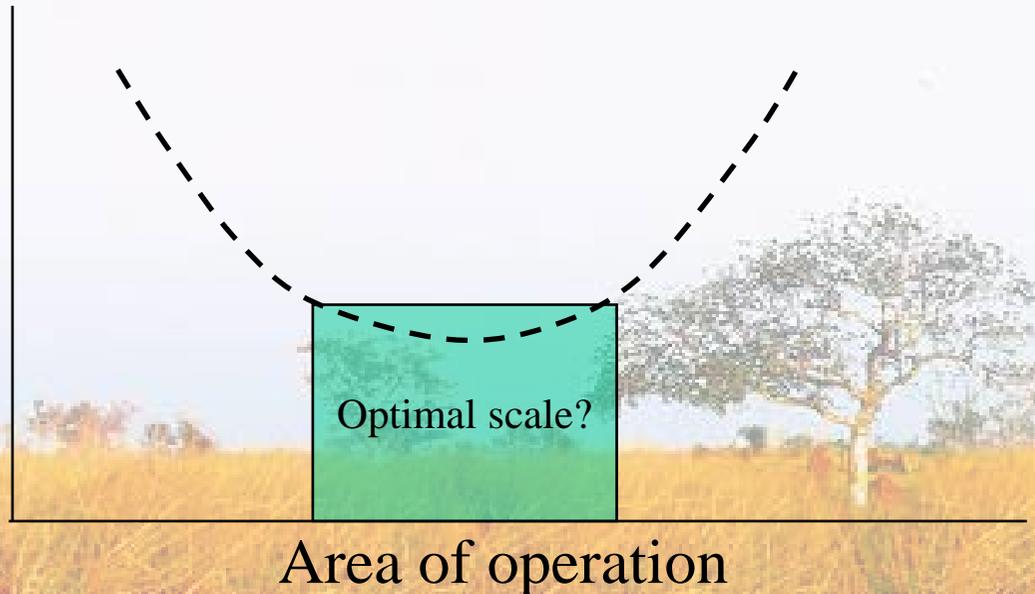
- Spatial scale
  - large scale needed to spread transaction costs
  - and reduce risk (year-to-year variance)
  - but large scales demand high levels of coordination
    - dealing with more groups
    - different land systems / vegetation types
    - covering more land use objectives
    - involving divergent land use practices
  - probably an optimal scale
    - balancing benefits of risk and cost sharing against complexity from heterogeneous interests and objectives



# Connecting with markets - challenges



Unit cost



# Connecting with markets - challenges

## – corporate processes

- additional to orthodox business governance
  - rules for participation and benefit sharing
    - » rights of traditional owners *versus* those actively delivering
  - norms for meeting money business obligations in tandem with customary obligations
    - » employment models and job design
  - sanctions against “free-riders”
  - processes for managing risk
    - » accruing reserves
    - » agreements on role of Government in risk management



# Summary

- WALFA is important because it demonstrates feasibility of GHG abatement connected with fire
- real opportunities for entry to markets
  - less than full coverage by compliance markets is desirable
  - maintain focus on voluntary markets while meeting highest validation and certification standards of compliance markets
- also identifies outstanding key issues
  - optimal scale of operations and tractability of large scale cooperatives
  - rules for managing internal tensions over access and benefits
  - business models capable of managing other cultural demands
- prospects appear good but require informed supportive policy and continued investments in research and capacity

