



EFFICIENT 20

***“European Farmers and Foresters
Involved for Contributing to an Intelligent
Energy Network towards the Target of 20%
reduction in fuel consumption”***

***D3.5 Pilot groups action plan guidelines
September 2010***

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3.3.2 Support to the pilot groups proposition

Assessment of initial situation advantages/unadvantages, bills analysis → Fiche of pilot groups D3.10

1st Meeting

EFF20 Presentation

Choice of fuel equipments ; definition of the monitoring program → Fuel Equipment for Pilot Groups

Initial Questionnaire on Awareness → D6.3

1st Monitoring : drive like usual → example : Tillage Consumer Survey

Capture of monitoring consumptions in the Database → Database with user guide, training program D2.2



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3.3.2 Support to the pilot groups proposition

2nd Meeting

Expectations of farmers : motivation, knowledge and competence, behavior

Fuel squanderings, marge of improvement : reduction Objectives → Action Plan Guidelines D3.5

Analyse monitoring : Plan the actions to implement → Action Plan template D3.6

Choose at least 4 solutions to test

Plan Eco-driving session

2nd Monitoring : implementing Action plan with first measurement → drive like usually

And second measurement → implement fuel saving solution

The two measurements will be carried out the same day or in very close conditions

Capture of monitoring consumptions in the Database → Database with user guide, training programm D2.2



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3.3.2 Support to the pilot groups proposition

3rd Meeting

Analysis and feedback on registered data → Action Plan completion D3.6

General discussion on lesson learnt and new solutions to implement → Action plan completion D3.6

Questionnaire on awareness / Second time → D6.3



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Aim of Action Plan Guidelines

Help the Pilot Group Leader to define his action plan :

1/ To detect **fuel squanderings** ;

2/ To inform about all the fuel saving actions which are potentially effective ; and help to **define priority ways to implement** in 2011-2012

3/ To **make animation/liveliness of the group** : encourage it's possible to saving fuel together ; knowing that the overview of the context is determinant (repartition of the farms, size of plots, wether...)



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1/ Detect fuel squanderings

Concerning the habits of work of the driver :

Deep of work



Choose good soil conditions





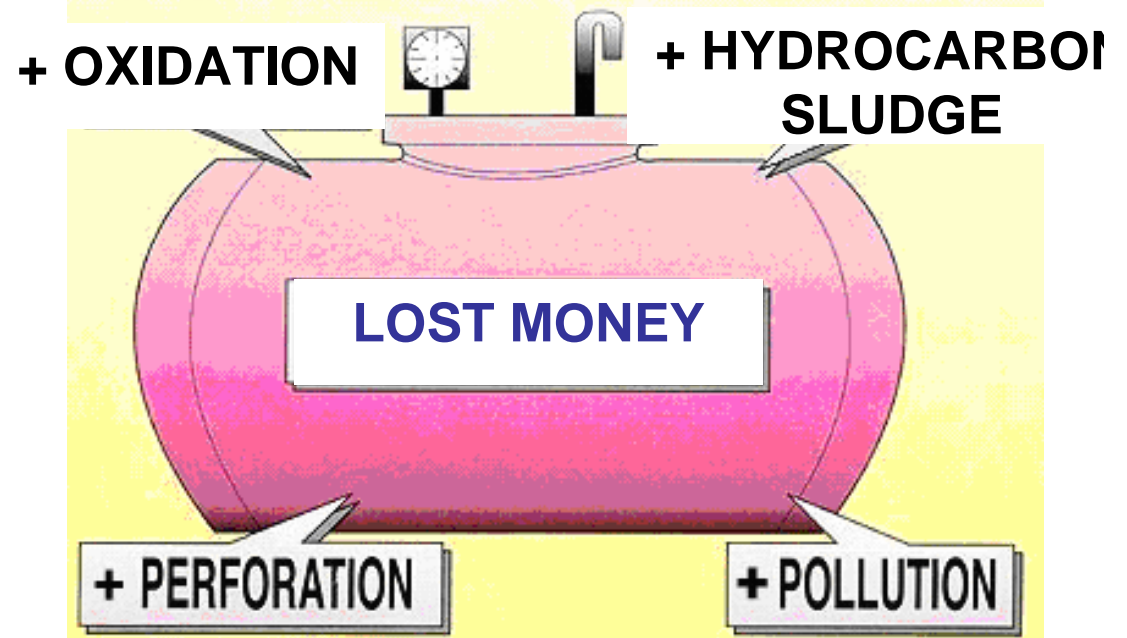
1/ Detect fuel squanderings

Concerning the tractor setting :

Dark smoke



Old farm tank



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1/ Detect fuel squanderings

The setting of the equipments : Measurement of air pressure in the circuit when you lift the tool

short convergence



long convergence





1/ Detect fuel squanderings

Reckoning result

Fuel bills 2009 and monitoring 2010-2011

Completed with the initial questionnaire

Theoric consumption	Real consumption	Marge of improvement
8 500 L	9 650 L	1 150 L → 9,0 %
Number of hours worked average	Number of hours indicate in the tractor	Difference
500 h	627 h	127 h

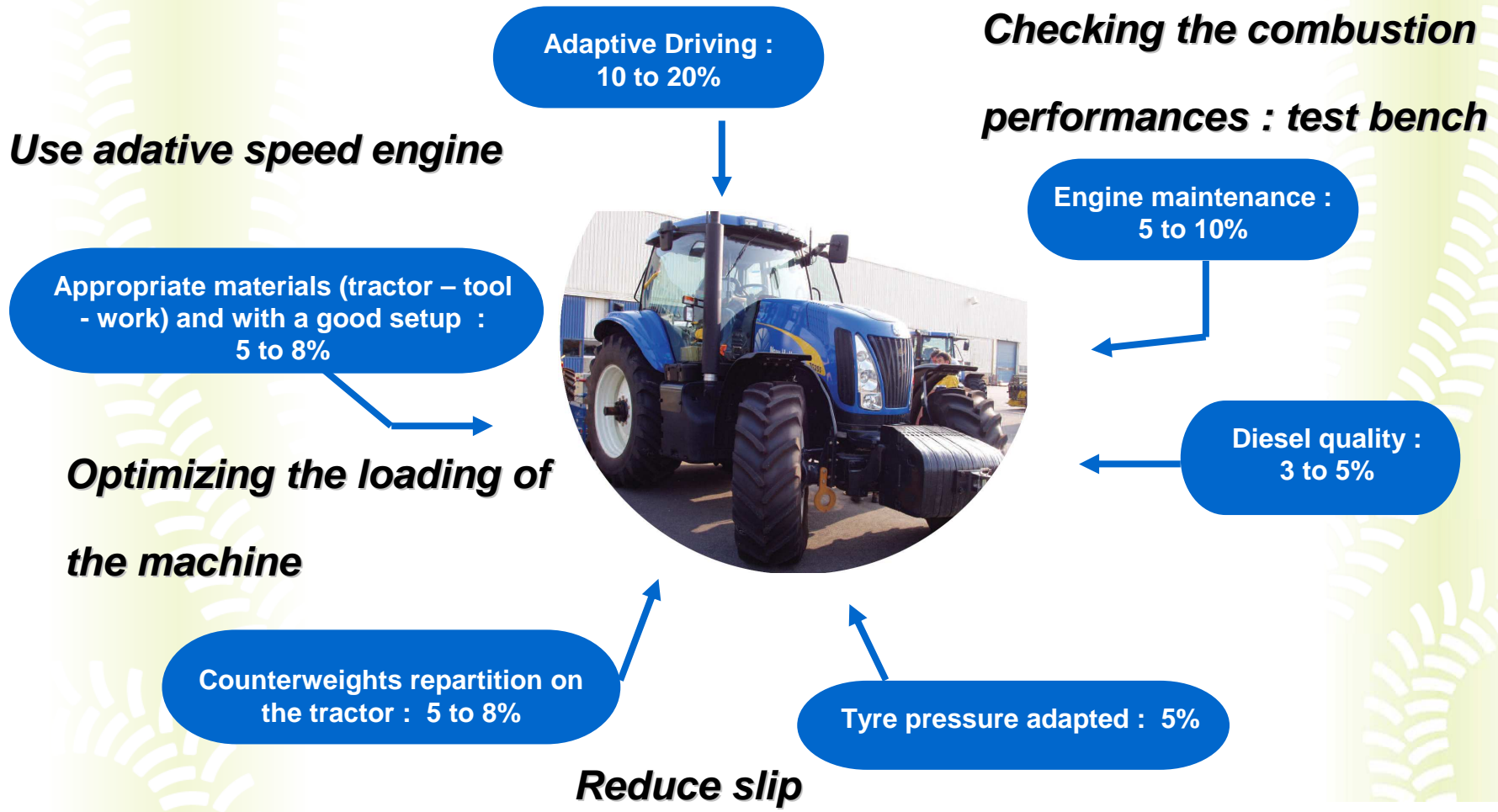
Easier to estimate with a contractor

Try to identify the activity corresponding.
Maybe it is low engine hours 2L/h : tool adjustment, tool setting, maybe speaking...
Maybe it's high engine 13L/h in transportation





2/ Actions concerning each member and his tractor





2/ Actions concerning each member and his tractor

Concerning the habits of work of the driver :

Possibility to use a front tool like a front counterweight



Think about the number of tillage operation the soil need

1 time : 8L/ha

2 times : 16L/ha

3 times : 24L/ha

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more times : ?L/ha





2/ Actions concerning each member and his production system

Concerning the production system → rotation, crop itinerary, optimizing journeys during livestock feeding, spreading...

Maybe the group is composed of different kind of farms with different marge of progress

Try to give some consumption marks (L/ha) → objectives for each farm

Milking and 10ha crops / Milking and 50ha crops

Beef cattle without crop / Milking, crops and beef cattle / etc...

Conventional / Organic farming



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3/ Concerning the group : encourage collective spirit

Common activity, delegate or share the power used like in heavy works : machinery rings, equipment co-operatives, contractors

Anticipation : plan together 2-3 days before start workings

Reduce transportation : collaboration like in harvesting time, manure spreading, planting ...



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3/ Concerning the group : encourage collective spirit

Regular meetings (more than 3 times) to establish **conviviality**

Small competition between the members regarding monitoring surveys

Arrangements between the members : ready to share some work or maybe change some plots...



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