

# CONTENTS

## MEDICAL GRADE ETHANOL PROJECT

	<u>Page</u>
<b>PREFACE</b>	(i)
<b>GLOSSARY</b>	(ii)
<b>SUMMARY</b>	(iii)
<b>1. THE PROJECT CONCEPT .....</b>	<b>1</b>
1.1 The Basic Concept .....	1
1.2 Expansion of the Basic Concept .....	2
1.3 Environmental Aspects.....	3
<b>2. THE PRODUCT .....</b>	<b>3</b>
2.1 Definition and Specifications .....	3
2.2 Applications .....	4
<b>3. THE JUSTIFICATION OF THE PROJECT.....</b>	<b>5</b>
<b>4. THE MARKET DIMENSIONS .....</b>	<b>7</b>
4.1 The Market Size and Project Parameters .....	7
4.2 Market Prices.....	11
4.3 Competition.....	12
<b>5. THE TECHNOLOGY &amp; PRODUCTION PROCESS.....</b>	<b>13</b>
5.1 The Technology .....	13
5.2 The Production Process .....	13
5.3 The Technology Source.....	18
<b>6. THE PRODUCTION REQUIREMENTS.....</b>	<b>19</b>
6.1 Raw Materials & Consumables .....	19
6.2 Utilities .....	20
6.3 Manpower.....	20
<b>7. INVESTMENT COSTS .....</b>	<b>21</b>
7.1 Summary .....	21
7.2 Total Fixed Investment Costs .....	22
7.3 Pre-production Costs .....	23
7.4 Working Capital .....	24
<b>8. PROJECT PROFITABILITY .....</b>	<b>25</b>
8.1 Overview .....	25
8.2 Financial Results - 100% Equity Case .....	25
8.3 Financial Results - Loan Case : 50% Equity/50% Loan.....	27
8.4 Sensitivity Analysis: Key Factors .....	29
<b>ARABIC SUMMARY</b>	