ISO 15663:2021-02 (E)

Petroleum, petrochemical and natural gas industries - Life cycle costing

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms, definitions and abbreviated terms **1**
3.1 Terms and definitions 1
3.2 Abbreviated terms 8

4 Application **8**
4.1 Users of this document 8
4.2 Framework conditions 9
4.3 Limitations 10
4.3.1 General 10
4.3.2 HSE considerations 11
4.3.3 Sustainability and climate change considerations 11
4.4 Benefits of life cycle costing 12
4.5 Life cycle costing within the life cycle phases 13
4.6 Life cycle costing subject matters 15
4.7 Technology development 16

5 Management of life cycle costing **16**
5.1 General 16
5.2 Objectives for management of life cycle costing 17
5.3 Roles and responsibilities 18
5.4 Strategy and planning – life cycle costing management plan 19
5.4.1 Life cycle costing management plan 19
5.4.2 Life cycle costing process 19
5.5 Contractual strategies 20
5.6 Assessment and feedback 20
5.7 Training and competence 21

6 Methodology **21**
6.1 General 21
6.2 Step 1 — Scoping 21
6.2.1 Objective 21
6.2.2 Define scope and measures 22
6.2.3 Identify potential options 24
6.2.4 Define options 24
6.3 Step 2 — Cost drivers and data collection 24
6.3.1 Objective 24
6.3.2 Identify potential cost drivers 25
6.3.3 Define cost elements 26
6.3.4 Identify and collect data 26
6.4 Step 3 — Modelling and analysis 26
6.4.1 Objective 26
6.4.2 Develop model 26
6.4.3 Analyse and assess 27
6.4.4 Consider uncertainties and sensitivities 27
6.5 Step 4 — Reporting and decision-making 28
6.5.1 Objective 28

6.5.2 Report and recommend 28
6.5.3 Decide and implement 28
6.5.4 Capture lessons learned 29
Annex A (informative) **Life cycle costing implementation** **30**
Annex B (informative) **Life cycle phases** **50**
Annex C (normative) **Life cycle costing techniques** **58**
Annex D (informative) **Data input** **79**
Annex E (informative) **Examples** **87**
Annex F (informative) **Assessment and feedback** **100**
Bibliography **102**